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Henry A. Paxson

A COLLECTION OF PAPERS

READ BEFORE

THE BUCKS COUNTY
HISTORICAL SOCIETY



PUBLISHED FOR THE SOCIETY

BY

FACKENTHAL PUBLICATION FUND

1932

VOLUME VI

EDITORIAL COMMITTEE

WARREN S. ELY

HORACE M. MANN

DR. B. F. FACKENTHAL, JR.

PRESS OF
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THE BUCKS COUNTY HISTORICAL SOCIETY

Organized November 20, 1880

Incorporated February 23, 1885

OFFICERS

For year ending May, 1933

President

B. F. Fackenthal, Jr., Sc. D., LL. D.

Vice-Presidents

Col. Henry D. Paxson

¹J. Herman Barnsley

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Col. Henry D. Paxson..... Holicong, Pa.

¹J. Herman Barnsley..... Newtown, Pa.

Mrs. Henry J. Shoemaker..... Doylestown, Pa.
(Term expires May, 1933)

Matthias H. Hall..... Princeton, N. J.

John H. Ruckman..... Doylestown, Pa.

²Mrs. Richard Watson..... Doylestown, Pa.
(Term expires May, 1934)

Dr. B. F. Fackenthal, Jr..... Riegelsville, Pa.

Warren S. Ely..... Doylestown, Pa.

Mrs. E. Y. Barnes..... Yardley, Pa.
(Term expires May, 1935)

Curator

Horace M. Mann

Librarian

Warren S. Ely

Treasurer and Secretary

Horace M. Mann

¹ Mr. Barnsley passed away at his home in Newtown, Pa., May 25, 1932.

² Mrs. Richard Watson passed away June 3, 1932.

CHANGES IN BY-LAWS AND PERSONNEL OF OFFICERS

Presidents

Gen. W. W. H. Davis.....	1880 to 1910
Dr. Henry C. Mercer.....	1911 to 1930
Dr. B. F. Fackenthal, Jr.....	Since May 3, 1930

Vice-Presidents

John S. Williams.....	Jan. 15, 1901, to Aug. 21, 1920
Dr. Henry C. Mercer.....	Jan. 21, 1908, to Jan. 17, 1911
Joseph B. Walter, M. D.....	Jan. 17, 1911, to Aug. 18, 1917
Dr. B. F. Fackenthal, Jr.....	Jan. 18, 1910, to May 3, 1930
Col. Henry D. Paxson.....	Since Jan. 15, 1921
*J. Herman Barnsley.....	Since May 2, 1931

Directors

The following changes have been made in the personnel of the Board of Directors since the publication of Volume V:

Matthias H. Hall, Jan. 15, 1927, to succeed	Grier Scheetz, who died Oct. 6, 1926
Hon. Harman Yerkes, Jan. 15, 1927, to succeed	Mrs. Harman Yerkes, resigned
John H. Ruckman, Jan. 19, 1929, to succeed	Hon. Harman Yerkes, who died March 1, 1928
Mrs. Henry J. Shoemaker, May 3, 1930, to succeed	Dr. Henry C. Mercer, who died March 9, 1930

For Charter, Constitution and By-Laws see Volume I

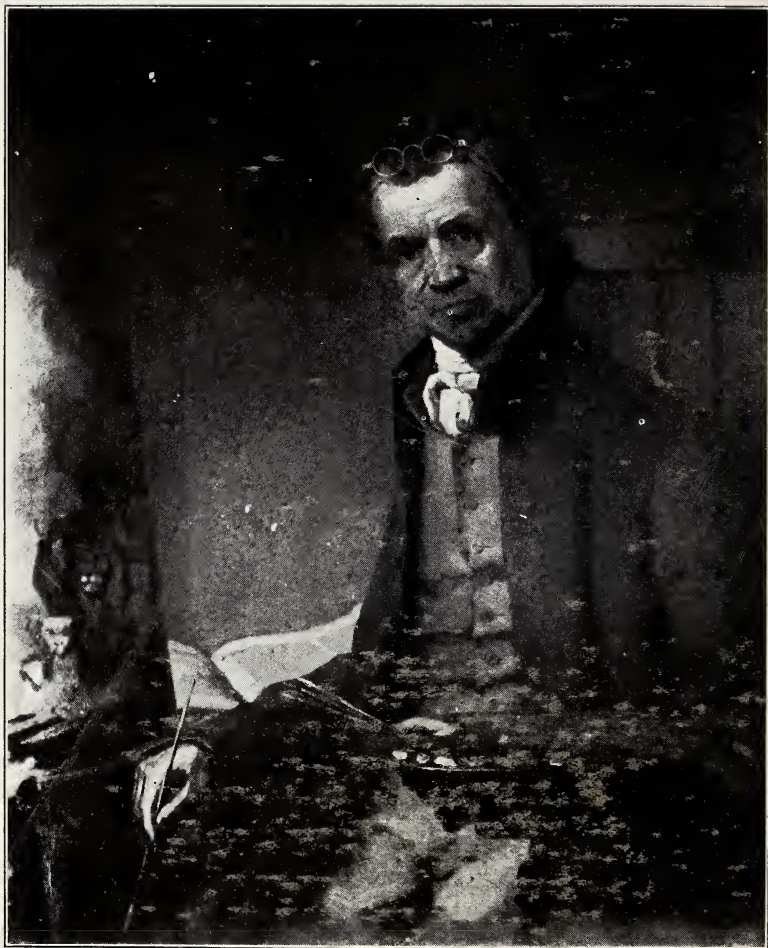
AMENDMENTS TO BY-LAWS

ANNUAL MEETINGS—At the Doylestown meeting, January 19, 1918, the time for holding the annual meetings was changed, first from the third Tuesday in January to the third Saturday in January, and second, at the Doylestown meeting, January 19, 1929, it was again changed to the first Saturday in May.

LIFE MEMBERSHIPS—At the Doylestown meeting, May 7, 1932, the by-laws were amended fixing the Life Membership dues at \$25.

The initiation fee remains at \$2, and the annual dues at \$1.

* Mr. Barnsley passed away at his home in Newtown, Pa., May 25, 1932.



EDWARD HICKS

From photograph of original portrait, painted about 1838, by Thomas Hicks (1823-1890), a cousin and student of Edward Hicks, the work done by Thomas Hicks when a boy about fifteen years old; the paint used being coach-painter's materials. Portrait, now 1932, in the possession of Sarah Hicks, of Newtown, Bucks County, Pa.

Edward Hicks and His Paintings

By HENRY D. PAXSON, JR., PHILADELPHIA

(Newtown, Pa., Meeting, June 3, 1922)

IN addition to a book of Memoirs published in 1851¹ several interesting papers² which can be found in the volumes of this Society have been written on Edward Hicks. They form an excellent biographical sketch of his life at the same time dwelling largely upon his religious work. But his life as an artist, or rather his artistic side, has been overlooked. It is from this standpoint that Doctor Mercer has asked me to write upon him.

As our meeting is held today in the same town where Edward Hicks made his home, held here in the very room in which he so often gave forth his interpretations of the Gospel, here but a few feet from the spot where his remains lie buried, I think that it is with a certain appropriateness that I now present to you what I have gleaned with regard to "Edward Hicks and His Paintings."

Before we can describe the art of Edward Hicks, it is first necessary to obtain some idea of his technical knowledge, methods, and of the materials which he used. Technic, which is the background, the very foundation (you might call it) on which an artist builds up his work, is at once lacking in both his hand and eye. Bad proportions, false perspective and crude shading effects readily present themselves to the overkeen perception of the art connoisseur or critic. It is evident that his technic was self-taught. Further, we know that whatever talent he possessed, he had developed himself, without the guidance of an instructor, without the aid of a school, without even the opportunity of studying the works of the old masters. Indeed, such circumstances immediately mark his work both unique and interesting from a standpoint of art.

¹ Memoirs of the Life and Religious Labors of Edward Hicks, late of Newtown, Bucks County, Pennsylvania, written by himself, Philadelphia: 1851.

² (a) Paper by Dr. Lettie A. Smith, of Newtown, Pa., read at a meeting of the Bucks County Historical Society, held at Solebury Meeting House, November 18, 1884, Bucks County Historical Papers, Volume I, page 217.

(b) Paper by Hannah E. Holcomb, of Newtown, Pa., read at a meeting of the Bucks County Historical Society held at Ambler Park, June 10, 1886, Bucks County Historical Papers, Volume I, page 385.

As to his materials, and purely mechanical necessities of painting, much can be said. The canvas on which he painted was of an ordinary and heavy character as he was not always able to obtain the finer and more expensive materials used by artists. This was stretched on strong frames that are generally two feet in height and two and one-half feet in length. It has preserved itself well and has not lost much of its elasticity. His colors are most striking and worthy of much praise. These he mixed with linseed oil and ground himself with a mortar and pestle which is still in the possession of his family. The remarkable feature about his paintings is that after three-quarters of a century they have not lost much of their tone and have but in very few cases cracked.

To describe his art now is an easy task. Truly it is only genius that can combine poor technical ability, lack of study, and inferior materials and produce paintings such as he has produced. He who regards them cannot help being deeply impressed by their sincerity, the consciousness of an artistic sense although not fully developed, and the extreme originality that so characterizes all his works.

As the dominant note of Edward Hicks' life was religion, it is not odd that his paintings have been greatly influenced in this line. Five of all those that have been unearthed and photographed are of a profound religious character. Each one bears the inscription, "The Peaceable Kingdom." In them he has presented animals such as the leopard, the tiger and the wolf lying peacefully beside the lamb and bullock. He shows a lion and ox eating straw from a common pile and even puts in a little child playing unharmed at the hole of the asp. But he has, in the midst of this Biblical picture which is the theme of the passage in the Book of Isaiah, "The wolf also shall dwell with the lamb and the lion" chosen to introduce in the background Indians, Quakers, old English boats as well as American scenery. Such an anachronism at once incites curiosity and criticism. It is difficult to form a good conjectural opinion as to just what the artist had in mind when he did this, but I think that he meant to express with the landing of our forefathers a harmony in all life and nature. His other paintings which have not been influenced by his religious character bear a marked resemblance to those of which I have just spoken. The idea

of the white man treating with the Indian has been carried out in his painting, "Penn's Treaty with the Indians," which is without exception his best known work, and his "Signing of the Declaration of Independence" is but a further thought on this same motive. His choice of subjects may be said to be good as they mostly represent well-known historical incidents and have done their part in making his works interesting.

The role that painting played throughout the latter part of his life was a most important one. He had, in his youth, when he was thrown upon his own resources, served as an apprentice in coachmakers' shops but when in later life he devoted himself to the spreading of the Gospel he was forced to give up this employment. He attempted farming and broommaking but was unsuccessful at both of these occupations. It was then that he resorted to his painting in order that he might meet the pecuniary necessities of life. He painted signboards, fireboards, and hotel signs. Some of his canvases he took to Philadelphia where he sold them to families for fifty dollars apiece. Three of these I have found in the houses of old Philadelphians.

Much of the latter part of his life he spent at his easel. But a few paces from his home in Newtown was a little shop which he had converted into a small studio. To this he made daily journeys and it was there that his cousin, Thomas Hicks, painted his portrait sitting by that easel at which he had for so many years endeavored to support his family. There he toiled until the day before his death in August, 1849.

The little shop stood for many years with its things just as its owner had left them, and would have been standing so today had it not been recently destroyed by fire.

In conclusion, I would like to say that part of my work has consisted in locating and cataloguing all of the known paintings of Edward Hicks. Thus far, the list includes about twenty. In this work I wish to acknowledge my indebtedness to many residents of Newtown through whose kindness I have been able to obtain photographs of these pictures and especially to Sarah Hicks who has given much valuable information and has arranged to have this portrait of Edward Hicks here today.

The portrait was painted about 1840 by Thomas Hicks who was a cousin of Edward Hicks. It shows the artist at his easel

on which rests a "Peaceable Kingdom," one of his favorite themes.

As an example of the "Peaceable Kingdoms," the picture which I now exhibit, belongs to my father, and to those of you who have never seen one of Edward Hicks' paintings, will serve to visualize that which I have endeavored to describe.



THE PEACEABLE KINGDOM

From photograph of original painting by Edward Hicks (1780-1849), of Newtown, Bucks County, Pa. This remarkable picture is an illustration of the 11th Chapter of Isaiah, embracing in the foreground all the animals there mentioned, and in the distance William Penn treating with the Indians. Original on canvas (24 x 33 inches), now, 1932, in the collection of Col. Henry D. Paxson, of Hollicong, Bucks County, Pa.

Turpentine Gathering in North Carolina

By DR. WILLIAM S. ERDMAN, BUCKINGHAM, PA.

(Doylestown Meeting, January 19, 1924)

RECENTLY while traveling in the southern states, I made inquiry in North Carolina in reference to the primitive and present methods used for tapping long leaf yellow pine trees (*Pinus sustralis*, *P. palustris*), also of the tools for gathering the sap or gum turpentine for distillation into turpentine. I also obtained tools used in making barrels and other cylindrical containers. North Carolina produces more turpentine than any other of the southern states.

After preparing a paper, somewhat in detail, on this industry to read before this society, I learned that the late Charles R. Nightingale had read a very able and somewhat exhaustive paper before our society on the same subject, and that his paper had been printed in Volume IV, at page 388, of our proceedings. But inasmuch as my name appears on your program for today, I decided not to read my paper in full, but merely to refer to it, and exhibit the tools which I obtained, and endeavor to explain their uses.

The first tool (exhibiting tool) used is called a "hack"; this is for removing the outside bark to a width of about one foot. Following that tool a specially designed axe is used to cut a "box" at the base for the sap to run into. This short-handled "puller" is used to remove as much of the remaining bark as the operator can reach, and if a removal of the bark for a greater distance is desired a long-handled "puller" is used.

The first tapping of a young tree is known as virgin sap. This is collected six to eight times during the first year, and four or five times the second year. The gum is collected by means of a



TURPENTINE SAP BUCKET

so-called "dipper." By means of this tool (exhibiting tool) the gum is chipped out of the boxes and deposited in buckets. They begin tapping trees when they reach the age of 20 to 30 years, and will produce from six to twelve gallons the first year, after that the production both in quantity and quality decreases as the tree ages. After the first year the gum is known as "yellow dip."

One man can chip eight to ten thousand boxes (not trees) in one season, which lasts from April to September inclusive.

The chief by-product is rosin. Some years ago this was of so little value that it was often discarded as waste, but during the World War there was a great demand for it and large quantities were reclaimed and sold. Of late years turpentine is also distilled out of sawdust and offal wood from the sawmills.

I now take pleasure in presenting these tools to our society.



TURPENTINE TOOLS

- A. Hack for removing the bark or scoring the trees.
- B. Box axe for cutting deep notches or boxes in the trunk of the tree to catch the dripping sap.
- C. Dipper, a flat spade-like tool, for scraping the gum out of the box into bucket.
- D. Puller used also for removing the bark or scoring the tree higher up than can be reached with the hack. Handle, 9 to 14½ feet long.
- E. Scraper for scraping off the drying gum. Handle, 6 feet long.



INDIAN WALK LUNCHEON PLACE MARKER

Springfield Township, Bucks County, about a mile southwest of Springtown on the road leading via Leithsville and Hellertown to Bethlehem. With Indian Chief Strong Wolf, an impressive orator who made an address at the unveiling, October 23, 1925, and who passed around the "Pipe of Peace," which was smoked by all on the platform.

The Indian Walking Purchase of September 19 and 20, 1737, and the Lunching Place of the Walkers at Noon on the First Day of the Walk

ADDRESS BY DR. B. F. FACKENTHAL, JR., RIEGELSVILLE, PENNSYLVANIA

OCTOBER 23, 1925

(At the unveiling of a monument erected in Springfield Township, Bucks County,
Pennsylvania.)*

MR. CHAIRMAN, LOCAL COMMITTEE, LADIES AND GENTLEMEN:

(Then addressing Chief Joseph Strong Wolf, an Ojibway Indian, who occupied a seat on the platform.)

AND special greetings to you, Chief Strong Wolf, who have honored us by your presence here today, as a representative of the original people of America. From the viewpoint of Christians, the second greatest event in the history of the world, was the discovery of America by Columbus. When the white man came here all these broad acres, with mountains and streams, belonged to your people. The country was then a primitive forest, but it was the character of land you loved, for it was indeed a free and untrammelled hunting ground. It was right that this condition should give way to civilization, but if you were a savage nation, that is an added reason why you should have been fairly and honorably dealt with.

Archæologists have found no reliable evidence of man antedating the glacial period. The terminal of the great northern ice glacier, which spread over this continent, was but a few miles north of here, and the location of this monument is therefore not within the limits of that area.

The mountains which Marshall and his associates crossed between the location of this monument and the end of the walk, a short distance east of what is now Mauch Chunk, are part of the great Appalachian range, running northeast and southwest near the Atlantic Coast; call them by what name you will, whether the White Mountains or the Green Mountains of New Hampshire and Vermont, or the Berkshires of Massachusetts,

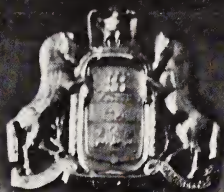
* This meeting was presided over by Hon. Henry W. Shoemaker, Chairman of the Pennsylvania State Historical Commission, later U. S. Minister to Bulgaria. Addresses were also made by U. S. Senator David A. Reed, Hon. William R. Coyle, Indian Chief Strong Wolf and Dr. Albert Cook Myers, Secretary-Director of the Historical Commission.

or the Adirondacks, Catskills or Shawangunks of New York, or the Alleghenies, Kittatinnies, Poconos or Blue Mountains of Pennsylvania, they all belong to the same series. The beautiful mountain which can be seen to the north of here, in all its autumnal grandeur, is a spur of the South Mountain, one of the foothills of the Kittatinny range, over which the walkers traveled.

EARLY SETTLEMENTS ON THE DELAWARE RIVER

The Delaware River was discovered, August 28, 1609, by Captain Henry Hudson, an Englishman, under the patronage of the Dutch East India Company. He called it the Zuydt or South River. The Indian name was Makerisk-kiskon. Later the English named it Delaware, in honor of Lord De La Warr, Governor of Virginia, who supposed himself to have been its first European discoverer. In 1616, Captain Cornelius Jacobson Mey, for whom Cape May was named, under the patronage of the Dutch, ascended the river and built Fort Nassau at the mouth of Big Timber Creek, below the present city of Gloucester, New Jersey. This was the first European settlement on the Delaware. During the same year, 1616, Captain Cornelius Hendrickson discovered the Schuylkill River, but it was not until 1623 that the Dutch West India Company of the United Netherlands (chartered 1622) took possession by right of discovery. Charles P. Keith, Esq., in his "Chronicles of Pennsylvania" (page 8), says the Dutch bought "land in 1629 on the west side of Delaware Bay, and for a short time keeping a fort there, and even in 1633 erected a fort on the Schuylkill." General Davis, in his "History of Bucks County," (first edition, page 19), says: "There is no doubt hanging over the fact that the Dutch were the first to settle in Bucks County." In 1657, the Dutch made a permanent settlement at New Amsel (New Castle, Delaware). The colony consisted of 108 Dutchmen, among them a schoolmaster, who soon had a school of twenty pupils. They had horses, cows, pigs, and goats. They made bricks and tiles, had gardens, raised rye and wheat and sent timber to Holland.¹ While it is an established and undisputed fact that the Dutch were the first to settle on the Delaware, twenty-two

¹ History of the People of the Netherlands, by Professor Blok of Leyden, Holland.



THE FAMOUS INDIAN WALK

OF A DAY AND A HALF
FROM WRIGHTSTOWN, BUCKS COUNTY
TO NEAR THE PRESENT MAUCH CHUNK
WAS PERFORMED FOR
THE PENN PROPRIETORS OF PENNSYLVANIA
SEPTEMBER 19-20, 1737

BY

EDWARD MARSHALL

AND HIS ASSOCIATES.

COMING BY THE OLD DURHAM ROAD AND
A WELL-BEATEN INDIAN PATH
AT NOON OF THE FIRST DAY
THEY ATE THEIR MEAL
IN THE MEADOW OF MARY WILSON
WIDOW OF GEORGE WILSON
AN INDIAN TRADER AND INNKEEPER
WHO SETTLED HERE ABOUT 1730
ON A 472 ACRE TRACT
LOCATED UPON THIS BRANCH OF COOK'S CREEK
IN PRESENT SPRINGFIELD TOWNSHIP
BUCKS COUNTY

MARKED BY
THE PENNSYLVANIA HISTORICAL COMMISSION
AND CITIZENS OF BUCKS AND NORTHAMPTON COUNTIES
1925

BRONZE TABLET ON SPRINGFIELD WALKING PURCHASE MONUMENT

years prior to the arrival of the Swedes, nevertheless, Swedish historians maintain that they came merely as traders, and that the first permanent settlement in what is now Pennsylvania, was by the Swedes, who made their first appearance under Peter Minuet in 1638, succeeded by Peter Hollandre in 1640, and then by Governor Johan Printz, who established the first permanent seat of government on Tinicum Island in 1643.² Seventeen years later, in 1655, the Dutch drove out the Swedes, and nine years later, in 1664, the English under the Duke of York, during the reign of King Charles II, overawed the Dutch on Manhattan (now New York), obtaining a surrender of that region without shedding blood. As part of their conquest they then entered the Delaware River, but the Dutch garrison resisted their attack, therefore, on Sunday morning, October 1, 1664, their fort was attacked, killing three and wounding ten. The English then took full possession of all Delaware River territory. The history of the world repeating itself, the white man subduing the savages, the strong conquering the weak, the survival of the fittest, the progress of the world advancing with each succeeding conquest. The Dutch have left their imprint upon the territory of their occupancy by the retention of the names they gave to streams, as indicated by the ending of "kill."

PENNSYLVANIA GRANTED TO WILLIAM PENN

Charles the Second, King of England, Scotland, France and Ireland, on March 12, 1664, granted to his brother James, Duke of York and Albany, Earl of Ulster, etc., afterwards King James II, "All of New England from the St. Croix to the Delaware." King Charles II, granted the Province of Pennsylvania to William Penn, Esquire, by Royal Charter dated March 4, 1681. This grant was made to satisfy a claim of his father, Vice-Admiral, Sir William Penn, to whom the government had become indebted in the amount of £16,000. James, Duke of York, etc. (under

² Dr. John Frederick Lewis, President of the Pennsylvania Historical Society, in his introduction to Amandus Johnson's book, "Instructions for John Printz," (page XV), in referring to the early occupation of lands on the Delaware by the Dutch says: "The Swedes had a far better title, because of the undoubted fact that theirs was the first permanent settlement upon the Delaware, not merely as a trading post, but a permanent occupation of the land." It is a fact, however, that all these early people were traders when opportunity arose. See also "Where Pennsylvania History Began," by Col. Henry D. Paxson.

whom the Dutch had been dispossessed of all territory in America, on which they had settled), conveyed and confirmed the territory embraced in the royal charter to William Penn, by two quitclaim deeds, bearing date August 21 and 24, 1682, giving him what they supposed was a clear title to his possessions. The so-called "three lower counties," Sussex, Kent and New Castle, comprising the entire State of Delaware, were included in the grant to William Penn, and by an act of Union passed December 7, 1682, by the representatives of those counties they were annexed to the Province of Pennsylvania, and continued under the same government until July 4, 1776, when Delaware was declared a free and independent state.

William Penn sailed from England by ship "Welcome" September 1, 1682, and entered the Capes of the Delaware October 27th of that year, arriving at the town of New Castle on the following day, where he presented his deeds from the Duke of York and took formal possession of what is now the State of Delaware. The date of his arrival at Upland (later Chester) has been a matter of dispute, but most authorities say that it was on the following day, October 29, 1682.

His newly acquired territory was so sparsely settled that he divided Pennsylvania into but three counties, Philadelphia, Chester and Bucks. All lands north and northwest of Philadelphia County (Montgomery was then part of Philadelphia County) was included in Bucks, which was then an unbroken wilderness; in fact, so little was known of its limits that it was described as extending only to the Kittatinny Mountains. It included parts of what are now Potter, Tioga, Lycoming, Columbia and Schuylkill and all of Northampton, Monroe, Pike, Wayne, Lehigh, Carbon, Luzerne, Lackawanna, Wyoming, Sullivan, Bradford and Susquehanna Counties. These were part of Bucks down to 1752, when Northampton County was erected. All the land included within the zone of the Walking Purchase was, therefore, at the time of the walk, within the limits of Bucks County.

CONNECTICUT CLAIMS

It appears that King Charles II had made prior grants of land in America, which probably through ignorance, mistakes or greed, overlapped each other. Thus the grant to Massa-



John D. Williams

chusetts, dated March 19, 1682, included a large area on the Susquehanna River in the State of New York. That controversy was settled without bloodshed by two land speculators, Phelps and Gorman, who, after purchasing the rights from the Indians, and therefore extinguishing their title to the soil, paid the State of Massachusetts \$750,000 to relinquish its claim to the disputed territory, whereupon it automatically became part of the State of New York. This was part of the "Lands of the Six Nations," where General John Sullivan so completely crushed the Indian uprising in 1779, starting his expedition from Easton, over a route now known as Sullivan's Trail. In like manner a grant to John Winthrop and his associates for the State of Connecticut, dated April 20, 1662, included not only what is now within that state, but all the lands west thereof; in other words, from sea to sea. This was twenty-one years prior to the royal charter to William Penn, and took in all of Pennsylvania, north of a line that would pass through the state about where the present towns of Stroudsburg and Clearfield are located, cutting off about 42,000,000 acres or nearly one-third of the state. In Ohio these Connecticut claims were known as the "Western Reserve." In 1670, John Winthrop, on behalf of Connecticut, took possession of the country north of the Delaware Water Gap, known as the Minisink country, and built a fort on the Delaware River. The Indians objected to any white settlements within their favorite hunting grounds, and soon drove them out. Later attempts to settle there ended with the same result. It was not until 1768 that settlements were made by Pennsylvania in that disputed territory, which the Indians were not willing to concede because from their viewpoint, it was not honestly acquired.

PENNAMITE WARS

The contentions between Pennsylvania and Connecticut did not become acute until Connecticut attempted to make settlements in what is now Luzerne County, in the Wyoming Valley. This resulted in two separate wars, which were carried on for six years, with the sacrifice of many lives. These are known in history as the "Pennamite Wars," in which the Indians took an active part, allying themselves with Connecticut. In 1782,

after the close of the Revolutionary war, the controversy was left to arbitrators, who met at Trenton, New Jersey. While the arbitrators recognized the fact that Connecticut had the prior claim, a compromise was agreed upon by which some concessions were granted to Connecticut, and the decision rendered in favor of Pennsylvania. This settlement was thereafter known as the "Decree of Trenton." I mention these complications to show how an injustice to the Indians in 1737, was far-reaching, and led them many years later to ally themselves with Connecticut in the Pennamite wars, as well as to show the unsettled condition of our frontier at that time. In like manner the Indians sided with the French in the French and Indian war of 1755-60, which can also be traced directly to the outrage done them by the dishonest Walking Purchase of 1737, and which in many other ways was far-reaching and retarded the development of our beloved Commonwealth.

INDIAN RIGHTS PURCHASED BY WILLIAM PENN

In the grant to William Penn the rights of the aborigines to the soil were not mentioned, but it was part of Penn's plan to extinguish them by purchase. Prior to his arrival in America he enjoined upon his agent, William Markham, to deal justly and amicably by them, and during his lifetime his wishes were always respected. He, himself, always dealt fairly and honorably with them, and ever retained their friendship and good will. The consideration paid the Indians for their land was but trifling, even when the low values of those primitive times are considered, but there was always a bargain and sale between them, which was satisfactory to both, and no attempt was made to take any undue advantage of the Indians.

The first purchase of land from the Indians was by deed dated July 15, 1682, prior to the arrival of William Penn, negotiated by his agent and kinsman, William Markham.³ This embraced all the territory on the Delaware between the Falls of the Delaware and the mouth of Knowles Creek in Upper Makefield Township, thence westwardly along the base of Jericho Mountain to the Neshaminy Creek, thence down the Neshaminy to the Delaware

³ For copy of this deed see Pennsylvania Archives, First Series, Vol. I, page 47. See also 2 Smith's Laws, pp. 109, 110.



TABLET ON MONUMENT AT "GREY STONES"

Morrisville, Pa., to mark the starting place of William Penn's first purchase of land from the Indians, July 15, 1682.

(Designed by Dr. Henry C. Mercer)

River. The northern boundary intersecting the Durham road near where Wrightstown meeting-house now stands. This intersection was in 1884, marked by a monument erected by the Bucks County Historical Society.⁴ This first grant included all of the townships of Bristol, Falls, Middletown, Newtown and Lower Makefield, and parts of Upper Makefield and Wrightstown. The second purchase in Bucks County was made by William Penn in person by deed dated June 23, 1683, and was for land lying between the Neshaminy and Peapack Creeks, partly in Montgomery County. The part lying in Bucks County embraces the townships of Bensalem, Southampton, Northampton, Warminster and Warrington.⁵ In like manner all lands in Pennsylvania were purchased from the Indians. Surveys were generally made by the distance a man could travel within a given time. No one ever heard of serious complaints from the Indians for any injustice or unfair advantage having been taken in the measurements of land, other than that of the celebrated Walking Purchase of 1737, the only one that has any special historic significance. A treaty made in 1686 would have been during the lifetime of William Penn, who died in 1718.

Many historians, including William J. Buck, incline to the belief that there was no deed executed in 1686. There are, however, evidences to show that there was a treaty, but the Indians claimed that the original document had been altered; in fact, they called it a forgery; their grievance may have referred to its conditions and not to the fact of there not having been a treaty. It is certainly most unfortunate that that particular document should be the only one to become lost. My good friend, Albert Cook Myers, tells me that he has seen a copy of this Walking Purchase deed of 1686, but if the original document was altered, as claimed by the Indians, a copy would not reveal that condition, particularly in this instance in view of the serious charges of the aborigines against Thomas Penn.

The Indians also objected to the Penns granting patents for

⁴ The deed for this grant refers to a path leading to the Indian town of Playwicky. The site of Playwicky, definitely located by Dr. Albert Cook Myers, is on the Van Artsdalen family farm in Southampton Township. On October 17, 1925, a monument was erected alongside the public road nearby indicating its location. (See Bucks County Historical Society, Vol. V, pp. 497 and 500.)

⁵ For copy of this second deed, see Pennsylvania Archives, First Series, Vol. I, page 62.

lands not included in any treaty, and in like manner the Penns objected to the Indians selling lands to the settlers. These conditions resulted in a parley to settle their disputes. The first conference was held in 1734 at Durham Iron Works, about three miles east of this monument, where the Penn representatives exhibited what they said was the original agreement of 1686. An adjourned meeting was then held at Pennsbury, May 5, 1735, and a final meeting at Philadelphia, August 25th, of that year, at which a new Walking Purchase agreement was entered into.⁶ Among the Indians present at these treaties were two Indian Chiefs, Tishcohan and Lappawinsoe, whose portraits are shown herewith. If the original treaty was in existence at that time, why was it necessary to enter into a new contract? The walk was accordingly made, but it tended to increase the dissatisfaction of the Indians, who were imposed upon and outwitted, as they had no thought of parting with their lands beyond the Lehigh River, or that trial-walks had been made.

All evidence indicates that there was a well-thought out and deliberate plan or scheme on the part of Thomas Penn and his associates, to take an unfair advantage of the savages. Preliminary trial-walks were secretly made to determine the best route, and to test out the qualities of the walkers. One trial-walk was around the western base of Haycock Mountain. That mountain, 965 feet high, is exceedingly rough and almost impossible to cross over, forcing them to go around it. The route finally selected was around the eastern base, along which trees had been blazed. The trial-walkers, of whom Joseph Doane was one, started out on the first trial-walk, April 22, 1735, during the very time that conferences were being held with the Indians. Nine days were taken for that trial-walk.⁷

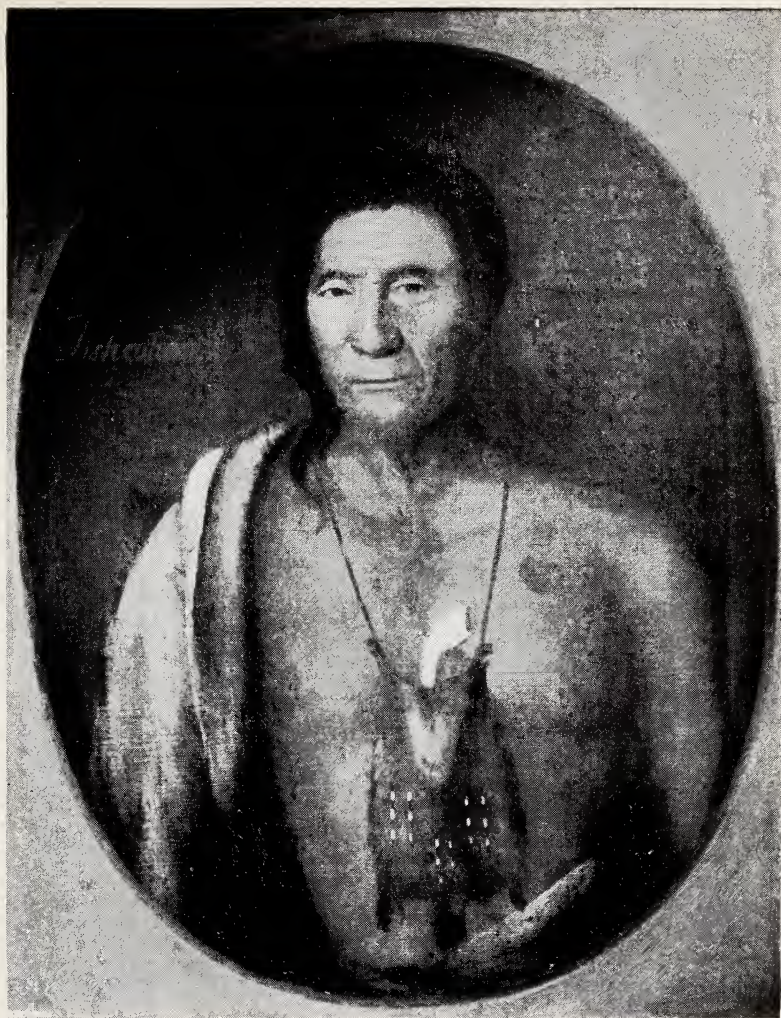
⁶ See 2 Smith's Laws, page 116, for copy of this new treaty; also Pennsylvania Archives, First Series, Vol. I, page 541.

⁷ James Steel, receiver general under Thomas Penn, wrote under date of April 25, 1735, to Timothy Smith, sheriff, as follows:

"The Proprietaries are impatient to know what progress is made in traveling over the land that is to be settled by the ensuing treaty that is to be held with the Indians at Pennsbury on the fifth of next month, and therefore I now desire thee, without delay, to send down an account of what has been done in that affair."

On the twenty-ninth of the same month (April) he again wrote to Sheriff Smith and Surveyor General John Chapman:

"The Proprietaries are very much concerned that so much time hath been lost before you begin the work recommended so earnestly on your leaving Philadelphia, and it being so very short before the meeting at Pennsbury, the



INDIAN CHIEF TISHCOHAN
(TEESHAKOMEN, TISHECUNK OR CAPTAIN JOHN)

Lived on Hokendauqua Creek in Allen Township, Northampton County, Pa. A Delaware Indian Chief present at the meetings held at Durham and Pennsbury in 1734 and 1735, and one of the twelve Indians who signed the treaty concluded at Philadelphia, August 25, 1737, preliminary to the Indian walk of September 19 and 20, 1737.

This and the portrait of Lapowinsa, both painted in 1735, are the only known portraits of the early Delaware Indians painted from life. Both are in the hall of the Pennsylvania Historical Society at Philadelphia.

HISTORY OF THE INDIAN WALK

The history of the walk has been told so often that I will not enter into its details, but will briefly say: That three walkers were finally selected, Edward Marshall, Solomon Jennings and James Yeates. They started out at sunrise on the morning of September 19, 1737, in the presence of John Chapman, the surveyor general; Timothy Smith, the sheriff; two of his deputies and a number of other white men. Some of the party were on horseback. Three young Indians accompanied them to watch the proceedings. Placing their hands on the chestnut tree where the monument now stands near the Wrightstown meeting-house, they awaited for sunrise, and then started off at a given signal on their race to outwit the Indians. Jennings could not keep up the pace, fell by the wayside during the forenoon at Red Hill, now Ottsville, $19\frac{1}{2}$ miles out from Wrightstown. Yeates took too much "toddy" and, according to Marshall's account, fell into the Lehigh River (probably at Lehigh Gap, erroneously referred to as Tobyhanna Creek), on the second day of the walk, and retired from the race. Marshall alone was the only one with sufficient endurance to continue to the end, at an estimated distance of 66 miles, to the north side of the Pocono Mountain, about three miles east of Mauch Chunk.⁸ The Indian watchers, appointed to accompany the walkers, left in disgust when they became aware of the intention to make the walk an endurance test, and grab their lands beyond the Lehigh River. What, therefore, must have been their chagrin when they discovered that the northern boundary, or head-line, was not to be direct to the Delaware River, at a point about where Stroudsburg now stands, but was to be run at a right angle, ending at Parker's

5th, of next month, that they now desire that upon the return of Joseph Doane, he, together with two other persons who can travel well, should be immediately sent on foot the day and a half journey, and two others on horseback, to carry necessary provisions for them on their return home. The time is now spent that not one moment is to be lost; and as soon as they have traveled the day and a half journey, the Proprietaries desire that a messenger may be sent to give them account without delay, how far that day and a half travel will reach up country."

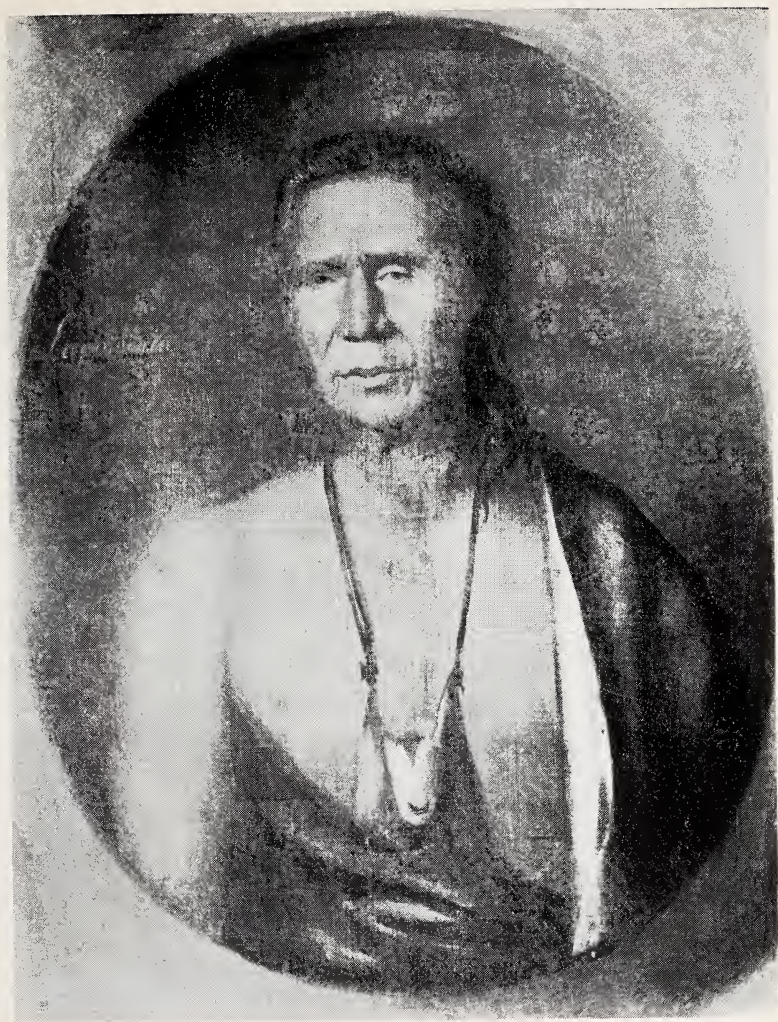
⁸ This total distance of 66 miles has not been verified. They traveled 29.9 miles during the first half day, and if the distance of 66 miles is approximately correct, it took them a full day to travel the remaining 36.1 miles, which, owing to the mountainous and unbroken country, was the most difficult part of their undertaking, and moreover one becomes weary at the tail-end of such a strenuous journey.

Glen, about five miles below the mouth of the Lackawaxen River, near Shoholo Creek, and thus taking in an additional 750,000 acres of land, and with it their fertile lands in the Minisinks and their favorite hunting ground in the Poconos. That territory is today a favorite hunting ground for American sportsmen, and moreover is one of the most popular playgrounds for summer vacationists. It took the Surveyor General four days to run out the line from the end of the walk to the Delaware River, a distance of about sixty miles.⁹

I have said that some tracts of land, within the zone of the walking purchase, were settled upon and some patented prior to the walk. The Penns had granted many tracts throughout Pennsylvania to Chief Justice William Allen, including some in the neighborhood of Bethlehem and in the Minisinks. Keith, in his "Provincial Councillors" (page 141), quoting Judge Huston, says: "I have heard more than once many years ago, that a distinguished barrister in London (referring to William Allen) furnished the money which finally paid off the mortgage (of £6,600) on the Province held by Henry Gouldney and his eight associates." Among other tracts granted were the "Manor of Chawton," at what is now Catasauqua, to John Page, September 11, 1735; 2,000 acres, February 24, 1736, to Thomas Graeme; 1,000 acres to James Hamilton; 1,000 acres to Patrick Greeme; 2,000 acres to James Bingham, and the Simpson tract at South Bethlehem. In fact, William Penn, personally, executed deeds for lands in Bucks County before the Indian titles were extinguished; one of these was to Shadrach Walley for 250 acres located near Newtown, bearing date March 22, 1681, sixteen days after the execution of the grant from King Charles II. The warranty recited in this deed protects the purchaser "from all manner of Titles, Claymes of any Indian or Native of the said Tract or province."

In a letter dated March 26, 1741, from the Delaware Indians to James Logan and Jeremiah Langhorne, both large owners in the Durham Iron Company, they complain that "about one hundred families of whites settled on their lands which they say Thomas Penn had sold to them," stating that "All this is our land except some tracts we have disposed of. The tract

⁹ See Surveyor John Watson's "Narrative of the Indian Walk," Hazard's Register, Vol. VI, page 209.



INDIAN CHIEF LAPOWINSA

A Delaware Indian Chief and Orator. Present at meetings held at Durham and Pennsbury in 1734 and 1735, and one of the twelve Indians who signed the treaty concluded at Philadelphia, August 25, 1737, preliminary to the Indian walk of September 19 and 20, 1737.

This and the portrait of Chief Tishcohan, both painted in 1735, are the only known portraits of the early Delaware Indians painted from life. The originals are in the hall of the Pennsylvania Historical Society at Philadelphia.

at Durham, the tract of Nicholas Depui, the tract of old (Casper) Weiser we have sold. But for the rest we have never sold, and we desire Thomas Penn would take these people off from our land in peace, that we may not be at the trouble to drive them off."¹⁰

It also appears that of the six tracts belonging to the Durham Iron Company, three of them lying in Durham Township, aggregating 6,410 acres, 123 perches, and covering the entire township, were released by the Indians before they were entered upon.¹¹ One of these was granted to John Striepers, March 9-10, 1682, taken over by James Logan, January 17-18, 1725, and patented to him, May 3, 1727; another was patented to Jeremiah Langhorne and John Chapman, September 8, 1717, and the other was part of a grant to the Free Society of Traders, and patented to Jeremiah Langhorne.¹²

The early settlement in Durham, the earliest in northern Bucks County, was due to the discovery of iron ore in the Durham hills, where James Logan, William Allen, Jeremiah Langhorne, Anthony Morris, William Bradford and their seven associates established the Durham Iron Works, starting the blast furnace in 1727. Their early shipments of iron, stoves and other castings were made by water down the Delaware River by Durham boats, which was the only mode of transportation until the Durham road was extended to the iron works. The Durham road, which ran out of Philadelphia to Bristol, was begun in 1693; in 1697 it was extended from Bristol, via Langhorne and Newtown to Wrightstown; in 1732, via Pineville and Buckingham to the ford at Tohickon Creek, and from there to Durham Iron Works in 1745.¹³ Although the extension to Durham was not authorized by the Court of Quarter Sessions, and not officially opened until 1745, it is clearly shown that there was a passable road there in 1737, because Edward Marshall, the walker, stated

¹⁰ From Logan manuscript in possession of Pennsylvania Historical Society. See also Buck's History of the Indian Walk, page 490, and History of Wayne, Pike and Monroe Counties, page 29.

¹¹ History of Wayne, Pike and Monroe Counties, page 29.

¹² The real estate owned by the Durham Iron Company consisted of six tracts, aggregating 8,511 acres, 100 perches, three as above stated in Durham Township; one in Springfield Township; one partly in Springfield, Lower Saucon and Williams Townships and the other in Williams Township.

¹³ The Durham road was extended from Durham to South Easton in 1755. Now referred to as the "Old Philadelphia Road."

that they traveled over the Durham road from Wrightstown to Gallows Hill. The walkers left the Durham road at Gallows Hill, where it bears to the right.¹⁴ From Gallows Hill, where the Three Tuns tavern stands, they turned slightly to the left or north, and then followed a well-beaten path, marked by blazed trees, winding its way through the valleys, between high hills, crossing the main branch of Durham Creek, to the site of this monument. A public road now occupies the location of the Indian path or trail. The distance from Wrightstown, as measured by an automobile speedometer, to Gallows Hill is 24.3 miles and from there to this branch of Cook's Creek, where they ate their midday meal, is 5.6 miles, making 29.9 miles traveled during the forenoon of September 19, 1737.¹⁵ From the site of this (Springfield) monument they followed over a trail, now a state road, leading through Leithsville and Hellertown, to the Saucon Creek, which they forded, thence to the Lehigh River, where at Jones' Island (marked on old maps as Ysselstein's Island), about one mile below the present Market Street bridge, Bethlehem, they crossed over, thence through the present city of Bethlehem, crossing the Monocacy Creek, thence to what is now the borough of Northampton, where at the eastern approach to the bridge over the Hoken dauqua Creek, on the concrete road from Bath, a Walking Purchase monument was dedicated September 20, 1925, on the anniversary of the very day the walkers passed through, thence along the Hoken-

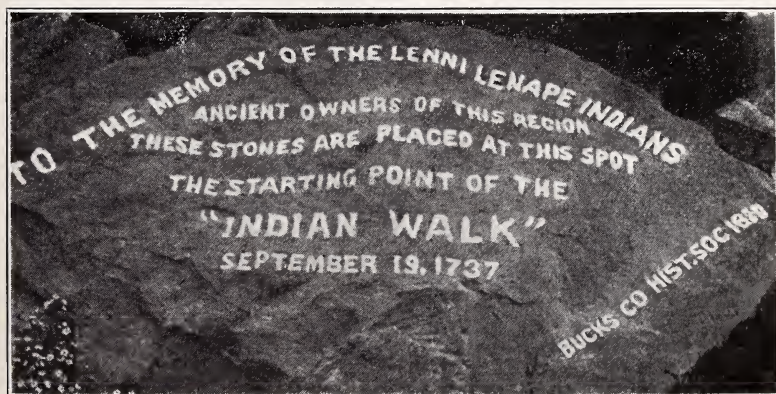
¹⁴ At Gallows Hill, sometimes called Stony Point, where in the forks of the road the Three Tuns Inn stands, a walking purchase monument was unveiled November 21, 1925, to mark the point where the walkers left the Durham road. The address on that occasion was made by Warren S. Ely, who took for his subject, "The Three Tuns Inn, Gallows Hill and the Indian Walk," making a total of five monuments, including the one at Wrightstown, erected on the line of the famous Indian Walk.

¹⁵ A detail of the distances between Wrightstown and Widow Wilson, as measured by an automobile speedometer, is as follows: To Pineville, 2.4 miles; Pineville to General Green Inn at Buckingham, 4.0 miles; Buckingham to Mechanicsville, 1.8 miles; Mechanicsville to Gardenville, 2.7 miles; Gardenville to Hinkletown, 2.5 miles; Hinkletown to Pipersville, 1.9 miles; Pipersville to Tohickon Creek, 1.5 miles; Tohickon Creek to Red Hill Church, 1.8 miles; Red Hill Church to the old abandoned Ottsville tavern, 0.9 miles; Ottsville tavern to Harrow, 1.2 miles; Harrow to Gallows Hill, 3.6 miles; Gallows to Bursonville, 1.0 miles; Bursonville to the Galbraith-Fackenthal farm, 1.0 mile; from there to the crossing of the main stream of Durham Creek, 1.5 miles; from Durham Creek to Weamer's house, 1.2 miles; Weamer's to Schoolhouse at forks of state road, 0.5 miles, and from there to the monument on branch of Cook's Creek, near where Widow Wilson's road house stood, 0.4 miles. Total distance, 29.9 miles.



LENNI LENAPE INDIAN MONUMENT, WRIGHTSTOWN, PA.

Occupies the site of the chestnut tree from which the walkers started at sunrise,
September 19, 1737.



INSCRIPTION ON LENNI LENAPE INDIAN MONUMENT

dauqua Creek to Edelman's gristmill, near Kreidersville, in Allen Township, on the old road from Bethlehem to Mauch Chunk, where a Walking Purchase monument was unveiled September 19, 1925, thence through the Lehigh Gap, to the end of the walk on the mountain, about three miles east of Mauch Chunk. The locations of both of these monuments are indicated on the map accompanying this paper.

LOCATION OF WILSON SETTLEMENT

To my brother, William Fackenthal, Esq., of the Northampton County bar, must be given the credit of correctly locating the Wilson Settlement, who, in his efforts to locate the homestead of our ancestor, Philip Fackenthal, who arrived in America from the Palatinate in 1742, discovered that it was the tract in Springfield Township, patented to James Galbraith.¹⁶ It is the farm lying one mile west of Bursonville, now known as the "Fairview Farm." The original survey of that property describes it as "Situate on both sides of a path which leads from Peter Lester's house to the Durham road." Reversing the route, in the direction the walkers traveled, this path started at Gallows Hill on the Durham road, passing through lands later patented to William Ware (on which tract at the intersection of the Durham road the Gallows Hill monument is erected), thence over the tracts patented to Robert Ware, Thomas Blair, Galbraith-Fackenthal tract, Peter Ruth, Nicholas Hess, John Lester, where the Durham Creek was crossed, thence over the Peter Lester tract, part of which is now owned by Hon. William H. Weamer. They entered the Wilson settlement at its southeastern corner, passing through to its western boundary, where on this branch of Cook's Creek, or as now called Durham Creek, where we are assembled today, this monument is erected; and here the walkers stopped for their noonday meal, September 19, 1737. It is in Springfield Township, within half-a-mile of the Bucks-Northampton County line. A map of the route through the windings of the hills from Gallows Hill is shown herewith. The evidence is conclusive without cavil or contradiction that this is the Wilson Settlement, and that this is the branch of

¹⁶ To James Galbraith by warrant October 2, 1739, survey November 1, 1740, patent April 11, 1749, recorded at Harrisburg in Patent Book "A," Vol. XIII, page 242, etc. Purchased by Philip Fackenthal, May 19, 1753.

Cook's Creek, where the walkers rested and ate their noonday meal. The records at Doylestown show that both George Wilson and his wife, Mary, were reported for keeping a disorderly house, and were accordingly fined.

In describing properties by metes and bounds at that early day, in this territory, the surveyors generally tied their surveys to the Durham road or to the Durham furnace tract. The tract on which this monument stands is part of a 472-acre tract settled upon by George Wilson, an Indian trader and a tavern keeper, who took squatter possession in 1730. In 1738, when the tract was surveyed to his widow, Mary Wilson, it was described as being "situate on a branch of Cook's Creek, near Durham."

My brother, William Fackenthal, Esq., in a paper read before the Northampton County Historical and Genealogical Society, after speaking of original titles, and describing in detail the requirements necessary to acquire and patent lands in Pennsylvania, has this to say about the George Wilson settlement:

"Occupancy of public land, however, was not always by application, warrant and survey, but any one wishing to settle upon unoccupied land took possession of it, made it his home, and improved it by building and cultivation, or either. The tracts so settled upon were called 'settlements' or 'improvements,' and the person so settling upon public land had a good title to it against every one except the Penns. So good was the settler's title that his right to a warrant, survey, and patent was paramount. These settlement-rights were frequently sold and on the death of the settler, passed by will or under the intestate laws, the same as other property, and such a settlement was the George Wilson settlement in the days of the Indian walk."

On the death of George Wilson his settlement passed to his widow, Mary Wilson, who, on November 10, 1737, within two months after the walk, was granted a warrant for the tract. It was surveyed to her, May 31, 1738, after which she transferred her right to John Briggs, to whom a patent was issued December 26, 1741.¹⁷

There has never been any controversy or difference of opinion as to the fact that the walkers stopped at noon the first day and

¹⁷ Recorded at Harrisburg in Patent Book, "A," Vol. IX, page 525, etc., under date of December 26, 1741.



FIVE CHESTNUT OAK
OF THE BAY AND A H
ON WHICH ARE CUT
PROPRIETARIES NAME
YEAR 1737.

PART

A MAP

BUO

RELEASED BY
PENNSYLVANIA
AGREEMENT
EXTENT OF A
FROM THENC

Cook's Creek, where the walkers rested and ate their noonday meal. The records at Doylestown show that both George Wilson and his wife, Mary, were reported for keeping a disorderly house, and were accordingly fined.

In describing properties by metes and bounds at that early day, in this territory, the surveyors generally tied their surveys to the Durham road or to the Durham furnace tract. The tract on which this monument stands is part of a 472-acre tract settled upon by George Wilson, an Indian trader and a tavern keeper, who took squatter possession in 1730. In 1738, when the tract was surveyed to his widow, Mary Wilson, it was described as being "situate on a branch of Cook's Creek, near Durham."

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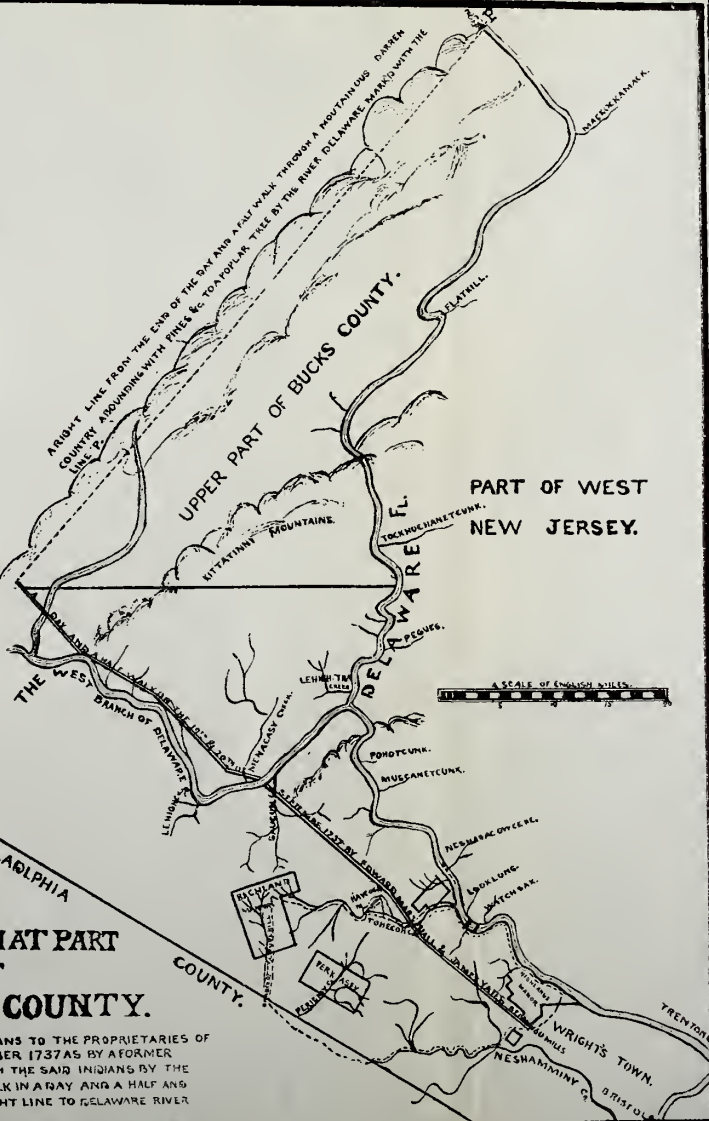
¹⁷ Recorded at Harrisburg in Patent Book, "A," Vol. IX, page 525, etc., under date of December 26, 1741.



FIVE CHESTNUT OAKS AT THE END OF THE DAY AND A HALF WALK ON WHICH ARE CUT THE PROPRIETARIES NAMES AND THE YEAR 1737.

A MAP OF THAT PART OF BUCKS COUNTY.

RELEASED BY THE INDIANS TO THE PROPRIETARIES OF PENNSILVANA IN SEPTEMBER 1737 AS BY A FORMER AGREEMENT MADE WITH THE SAID INDIANS BY THE EXTENT OF A MAN'S WALK IN A DAY AND A HALF AND FROM THENCE BY A RIGHT LINE TO DELAWARE RIVER





A MAP OF THE PART
OF
BUCKS COUNTY

SHOWING THE
RIVER AND THE
RAILROADS
AND THE
TOWNSHIP

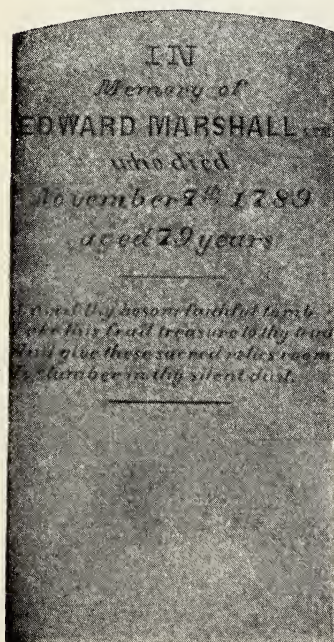
ate their meal at the inn of Mary Wilson at the Wilson Settlement, but various theories have been advanced or guessed at as to the location of that settlement. General Davis placed it in the meadow near Durham furnace; the Funk family tradition is that it was in the meadow now belonging to my friend, Hon. Henry S. Funk, at East Springtown, about two miles east of here; William J. Buck, Charles Laubach, Dr. J. I. Cawley and most other local historians have always followed the Funk tradition. Examinations of titles to many properties in that neighborhood, however, show that the Funk property is part of a 651-acre tract patented to Casper Wister, November 7, 1736, being part of the lands embraced in the Penn lottery scheme. The chain of title is complete and has been traced down through the Twinings to the Funks and all present owners, and at no time was any part of it occupied by the Wilsons. This Casper Wister tract is one of those to which I have referred as having been patented by the Penns prior to the extinguishment of the Indian title by the walking purchase. In the Wister survey the Wilson Settlement is described as its adjoinder on the west for a distance of 157 perches.

The property at Wrightstown, where the walkers started, was acquired in 1884 by the Bucks County Historical Society, whereon it erected a monument dedicated to the Lenni Lenape Indians. The Durham road is comparatively straight to Gallows Hill, where the walkers turned slightly to the left or north, following an Indian path or trail, leaving the present Bursonville to the right, thence through the windings of the valleys, 5.6 miles from Gallows Hill to yonder branch of Cook's Creek, where they were entertained at Widow Wilson's road house. Most authorities say that it took them but fifteen minutes to eat, indicating that Widow Wilson had the meal prepared and ready for them, and no doubt their "grog" too. The fifteen minutes lost in resting and eating were made up by their continuing to walk on that day fifteen minutes after sunset.

This monument is not erected to glorify the Indian Walk, as all true Americans should blush with shame for the injustice done the untutored Indians by the civilized white men. It is placed here simply as an historical marker to indicate the route of the walk.

The red men never forgave the English people for the wrong

done them. They resented it at every opportunity, and many of the Indian massacres of after years can be traced to their grievance. In 1755, three years after Northampton County was erected, and within the bounds of the walking purchase, upwards of fifty persons had been killed by the Indians, and many homes throughout the county were burned. In their revenge they drove every family out of the county for fifty miles above Easton, sparing only five friendly families at Depuys', now Shawnee, which had been settled mostly by people emigrating via Esopus, now Kingston on the Hudson River. Edward Marshall, the hero of the walk, was a native of Bustleton, Philadelphia County. At the time of the walk he lived on his farm in Tinicum Township, moving to Mount Bethel Township, Northampton County, in 1752, where he made his home on Jacobus Creek, which empties into the Delaware at the borough of Portland.



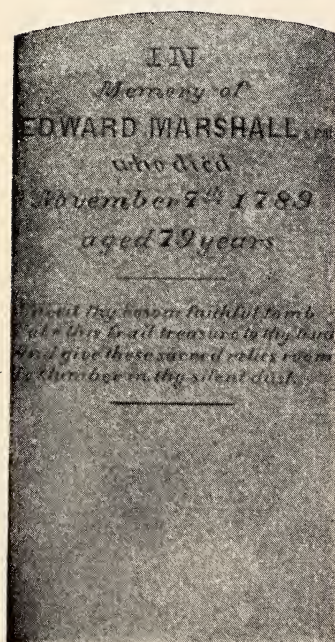
He was the special object of the Indians' hatred. During the latter part of 1755 he fled with his family to New Jersey, where they remained until the spring of 1757, when they moved back to their Northampton County home. During the latter part of May of that year, when he was on the mountain chopping wood, a band of sixteen Indians attacked his home, killing his wife (nee Elizabeth Oberfelt or Overfield) who was about to become a mother, and his eldest daughter, Catharine, aged about fourteen years. His eldest son, Peter, was killed later by a second attack of the Indians. During the same year, 1757, his brother William bequeathed to

him an unpatented island, containing 116 acres, 19 perches, in the Delaware River opposite the mouth of Tinicum Creek, in

TO PATENTS ON MAP OF THE INDIAN WALKING PURCHASE

	Area	Dates of Patents	Place of Rec- ord in Pat- ent Book at Harrisburg, Pa.
ee			
hoemaker.....	50- 80	Mar. 18, 1808	P -61-454
chart.....	108-130	Apr. 25, 1823	H -21- 82
phert.....	110	Feb. 25, 1808	P -61-456
ry Kneight.....	116-151	June 27, 1766	AA-15-811
achman.....	54- 49	Aug. 18, 1746	A -13-113
ogleman.....	127	Nov. 27, 1768	A -20-354
antzman.....	77-140	Jan. 9, 1808	P -61-279
yphert.....	122- 70	Jan. 9, 1808	P -61-278
Shlyer.....	86- 99	Jan. 30, 1809	P -61-279
Shlyer.....	50-120	Jan. 30, 1809	P -60-193
erpeck.....	35-120	Mar. 10, 1823	H -20-562
Sliffer.....	38- 20	Mar. 10, 1823	H -20-563
ooker.....	67- 89½	Jan. 2, 1810	H - 3- 16
Veil.....	32- 45	Oct. 30, 1776	A - 4-227
Bryan.....	51- 56	Apr. 27, 1758	A -19-290
Bryan.....	150-159	Aug. 14, 1760	AA- 1- 52
Brackenridge.....	129- 20	Aug. 10, 1787	P -11- 70
k Werner.....	23- 34	Warrant Jan. 16, 1786—	
		No return at Harrisburg.	
ck.....	28- 94	Mar. 7, 1786	P - 6- 92

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him an unpatented island, containing 116 acres, 19 perches, in the Delaware River opposite the mouth of Tinicum Creek, in



MAP OF A PORTION OF THE ROUTE OF
THE INDIAN WALKING PURCHASE
SHOWING LOCATIONS OF THE
LUNCHING PLACE AND GALLOW'S HILL MONUMENTS
WITH PROPERTY LINES OF LANDS CONTIGUOUS TO THE
ROUTE WHICH FOLLOWS THE NATURAL TOPOGRAPHY.
ACCOMPANYING A PAPER PRESENTED BY—
DR. B. F. FACKENTHAL JR.
PENNSYLVANIA HISTORICAL COMMISSION

KEY TO PATENTS ON MAP OF THE
INDIAN WALKING PURCHASE

Patentee	Area	Dates of Patents	Place of Record in Patent Book at Harrisburg, Pa.
1—Conrad Shoemaker	50-80	Mar. 18, 1808	P -61-454
2—John Reichart	108-130	Apr. 25, 1823	H -21-82
3—John Cyphert	110	Feb. 25, 1808	P -61-456
4—John Henry Koehn	110-151	June 27, 1766	AA-15-811
5—George Bachman	54-49	Aug. 18, 1746	A -13-113
6—Conrad Fogleman	127	Nov. 27, 1768	A -20-354
7—Philip Huntzman	77-140	Jan. 9, 1808	P -61-279
8—George Cyphert	122-70	Jan. 9, 1808	P -61-278
9—Michael Shlyer	86-99	Jan. 30, 1809	P -61-279
10—Michael Shlyer	50-120	Jan. 30, 1809	P -60-193
11—Jacob Overpeck	35-120	Mar. 10, 1823	H -20-562
12—Abraham Shlyer	38-20	Mar. 10, 1823	H -20-563
13—Jacob Kooker	67-89½	Jan. 2, 1810	H -2-16
14—Andrew Weil	32-45	Oct. 30, 1776	A -4-227
15—William Bryan	51-56	Apr. 27, 1758	A -19-290
16—William Bryan	150-159	Aug. 14, 1760	AA-1-52
17—Samuel Brackenridge	129-20	Aug. 10, 1787	P -11-70
18—Frederick Werner	23-34	Warrant Jan. 16, 1786	No return at Harrisburg.
19—John Black	28-94	Mar. 7, 1786	P -6-92
20—Philip Trap	85-102	Sept. 2, 1744	AA-14-764
21—Durham Iron Co.	178-20		
22—do	57-157		
23—do	88-127		
24—do	76-40		
25—Jacob Treighler	21-36	June 9, 1829	H -26-441
26—George Shaffer	58-135	July 22, 1774	AA-14-563
27—James Logan, Jr.	349-80	Apr. 23, 1774	AA-14-532*
28—Elias Bedelman	44-80	Nov. 20, 1751	A -16-41
29—Elias Bedelman	58-54	Nov. 20, 1751	A -16-41
30—Elias Rosenberger	27-147	Nov. 11, 1774	AA-14-750
31—Durham Iron Co.	129	Apr. 3, 1749	A -16-388
32—John Chapman	31-48	June 27, 1774	AA-14-531
33—William Armstrong	49-100	Mar. 13, 1741	A -10-252
34—Stephen Twining, Patent to John Briggs	472	Dec. 26, 1741	A -9-524
35—Casper Vister	651	May 10, 1738	A -8-387
36—Robert Ellis	58-120	Sept. 17, 1746	AA-15-538
37—Robert Ellis	45-80	Sept. 17, 1746	AA-15-539
38—Henry Bowman	109-120	Aug. 29, 1787	P -11-117
39—Isaac Burson	112-10	Aug. 29, 1787	P -11-117
40—Isaac Burson	194	Apr. 7, 1763	AA-4-292
41—William Crook	26-80	Apr. 7, 1763	AA-4-292
42—William Crook	23-30	Nov. 21, 1776	AA-16-68
43—Hugh Orton	114	Apr. 3, 1749	A -16-388
44—Durham Iron Co.	51-80	Mar. 9, 1786	P -6-130
45—Conrad Jacoby	49	Jan. 7, 1773	AA-13-325
46—James Peller	194-112	Oct. 29, 1739	A -10-160
47—James Mason	204-61	Oct. 12, 1740	A -10-219
48—Peter Lester	321-27	Aug. 12, 1739	A -15-291
49—Nicholas Hill	17-20	July 7, 1769	AA-11-100
50—Matthew Kreamer	500-27	Surveyed July 3, 1738	Book D, Vol. 85, page 271.
51—James Logan		No record of patent.	
52—John Lester	200	Oct. 30, 1740	A -10-219
53—Nicholas Hess	113	Aug. 21, 1752	A -17-220
54—Joseph Blair	155	Oct. 18, 1745	A -17-490
55—Philip Barron	40-26	Oct. 28, 1786	P -6-522
56—John Lester	40-26	Feb. 20, 1762	AA-3-96
57—Peter Ruth's Heirs	96-82	Mar. 11, 1834	H -32-532
58—John Amus (Amey)	19-145	June 5, 1827	H -24-423
59—Thomas Blair	422	Oct. 18, 1745	A -14-563
60—Robert Henderson	46-74	Nov. 30, 1751	A -16-105
61—Jesse Verity	153-34	July 25, 1805	P -57-187
62—John Lester	117	Feb. 20, 1762	AA-3-96
63—James Braith	125	Apr. 11, 1749	A -15-242
64—Isaac M. Jose's Heirs	43-5	Apr. 7, 1815	H -12-670
65—Samuel Julian	11-126	Aug. 29, 1873	H -72-229
66—Andrew Tucker	5-111	May 31, 1870	H -66-555
67—Henry Ford	31-147	July 15, 1871	H -69-648
68—Jacob Dehl	63-60	May 31, 1870	H -66-554
69—Andrew Tucker	38-102	June 7, 1832	H -32-121
70—Adam Ajest (Earnst)	127-131	Dec. 9, 1767	AA-10-186
71—Robert Ware	152	Dec. 10, 1745	A -12-399
72—William Ware	196-80	Feb. 14, 1744	A -12-225
73—John Harrison	158-40	Mar. 13, 1744	AA-4-158
74—John Harrison	155-40	Dec. 10, 1745	A -13-166
75—Andrew Harrison	153-40	Dec. 10, 1745	A -12-40
76—Alexander McCammon	250	Aug. 11, 1763	AA-5-165

* These two tracts are part of a warrant for 2,400 acres granted to James Logan, March 26, 1733. The right of 1,200 acres thereof being vested in James Logan, who by his will devised both tracts to his son, James Logan, Jr.

F.W. SLANTZ, DEL.

Bucks County, then known as Tinicum Island¹⁸ where he lived over the remainder of his life with his second wife, having in 1758 married Elizabeth, daughter of Nicholas Weiser, of Northampton County, then thirty years of age, whose father had been scalped by the Indians in 1755.

Edward Marshall died intestate November 7, 1789, at the age of 79 years. He was the father of twenty-one children, fifteen of whom, six sons and nine daughters, with his wife survived him. His body lies buried in the Marshall-Ridge-Cooper graveyard in Tinicum Township, near Erwinna, about three miles from his island home.

This cemetery is located on a tract of 164 acres, 130 perches of land (part of the Strieper tract), which Marshall purchased March 1, 1738, six months after the Indian Walk, and where he lived before moving to Northampton County.¹⁹ His grave is marked by a simple marble tombstone, which is fast going into decay. His widow, born in 1727, died October 12, 1807, aged 80 years, is buried alongside of him in the same graveyard. His rifle, shown herewith, is in the museum of the Bucks County Historical Society at Doylestown, Pa.

In conclusion, I will quote Keith, who, in his "Chronicles of Pennsylvania," pages 770 and 778, says:

"The year (1737) witnessed the consummation of the great Walking Purchase, in accomplishing which Thomas Penn, the son of the man most celebrated for humane and honest treatment of the Indians, has been portrayed as hurrying white men to their death to deprive the red men of a vast territory which had never been sold. * * *

"If, indeed, as the defenders of Thomas Penn have maintained, he was merely enforcing a contract, he is still to be con-

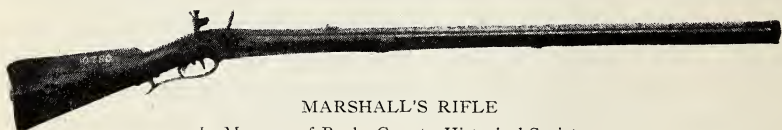
¹⁸ Although Tinicum Island had been for many years in possession of the Marshall family, it was not until February 2, 1811, that a patent was issued to William and Martin Marshall, sons of Edward Marshall, the walker. (Recorded at Doylestown, Deed Book, No. 40, page 208.) After various ownerships it was, on February 25, 1901, purchased at Sheriff's sale by John J. Stover, who on December 5, 1919, conveyed it to the Young Men's Christian Association of Trenton, N. J., for the consideration of \$5,000 (Deed Book, No. 421, page 527). This association changed its name to that of "Treasure Island."

¹⁹ Edward Marshall says that the walker who endured to the end of a day and a half, was promised a warrant for 500 acres of land as a reward; but that Thomas Penn would not carry out his promise. This suggests, however, that this tract in Tinicum Township, conveyed to Marshall within six months after the walk, may have been a gift as part of his reward.】

demned as a man and a statesman. He was grasping a million more acres than the children of the forest were disposed to allow for some worn-out and forgotten coats and utensils; and it was a case of a blunder which was criminal, to arouse the passions of the savages against his people; and has been recognized as the disgrace of the American colonies, and of the United States, that, when the Delawares finally demanded what they thought was justice, this land monopolist, instead of satisfying them, induced the Iroquois to overawe them."

Cooper, the novelist, says: "An Indian never forgets a favor or forgives an injury."

"Lo! the poor Indian! whose untutored mind,
Sees God in clouds, or hears Him in the wind."



MARSHALL'S RIFLE

In Museum of Bucks County Historical Society

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Dr. B. F.
BEFORE
HISTORIC
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EXPLORE

THE GREAT SOUTHERN
RAILROAD

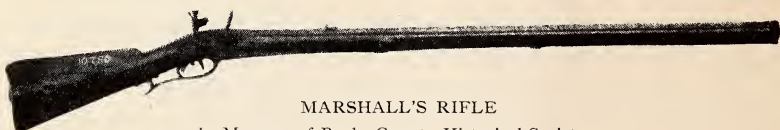
CHICAGO

THE GREAT SOUTHERN
RAILROAD

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MARSHALL'S RIFLE

In Museum of Bucks County Historical Society



MAP SHOWING
ROUTE OF
INDIAN WALKING PURCHASE
OF SEPT. 19 & 20, 1737

WITH LOCATIONS OF MAIN STREAMS
AND PRESENT CITIES AND TOWNS

ILLUSTRATING THE
PAPER PRESENTED BY

DR. B. F. FACKENTHAL JR.

BEFORE THE PENNSYLVANIA
HISTORICAL COMMISSION.

FRIDAY OCTOBER 23, 1925.

1 2 3 4 5 6 7 8 9 10
SCALE



The Three Tuns Inn at Gallows Hill and the Old Durham Road

ADDRESS BY WARREN S. ELY AT THE UNVEILING OF MONUMENT

(Gallows Hill, Springfield Township, November 21, 1925)

THE subject assigned to me for today's address is the Three Tuns Inn at Gallows Hill and the old Durham Road. I vividly recall that nearly thirty years ago, when I delivered an address before the Bucks County Historical Society at Wrightstown Meeting House, entitled "An Old Hostelry," a dear old Quaker lady, who was also on the program, seriously objected to an address being delivered in the Meeting House on a "grog shop," and having, during the address, stated that in the olden time much more attention was given to the selection of suitable men as landlords of our taverns, than at the present time, I got a severe call-down from the then presiding judge of the court, and inasmuch as the President Judge of Bucks County Courts is to follow me with an address, I am constrained to be a little more mild in my arraignment of the judiciary. I must say, however, that the lay-justices of the earlier courts exercised a wise discretion in selecting the proprietors of colonial inns, and that these early inns were located on the routes of travel through a thinly settled country. The inn was the first public gathering place on the routes of travel, where all classes could be refreshed on their journeys through a primitive wilderness, where news were disseminated, questions of the day discussed and measures taken for the advancement of the public interest.

The other branches of my subject are likewise difficult to handle for the reason that I am asked to give a history of the public road known as the Durham Road at the time of the Indian walk in 1737, whereas the road had no official existence as a public road until seven years after the walk was performed, it having been laid out by a jury appointed by the Court of Quarter Sessions and returned to that court on the 13th day of March 1744/5. However, it is clearly proven that there was a road here known as the Durham Road, because Edward Marshall, the walker, states that they traveled over the Durham Road to Gallows Hill, where they turned to the left and then followed

an Indian path. They therefore left the Durham Road at the point where this monument has been erected, and where this meeting is being held. It is also well authenticated that part of the products of the Durham furnace was hauled over this route to Philadelphia for a period ten years before the walk, showing that there was a well-established highway from the Tohickon Creek, to which point the road had been regularly laid out by authority of the Court of Quarter Sessions, but from here to the iron works at Durham, the tradition says that it followed very closely the present route of the Durham Road.

THE INDIAN WALK—The story of the Indian Walk of 1737, was so ably told by Dr. Fackenthal at the dedication of the marker placed at the lunching place of the walkers in the Wilson meadow, near Springtown, on October 23, last, supplemented by his explanation of his chart this afternoon, showing the line of the walk and the county-line of Bucks in 1737, that it seems needless for me to add anything to that subject.

Dr. Albert Cook Myers has again voiced his plea for our charity towards Thomas Penn and his associates in the matter of the mean advantage taken of the Indians, both in the matter of the walk and the drawing of the line from its termination near Mauch Chunk to the Delaware River, near the mouth of the Lackawaxen River. We heartily concur with him in the high tribute he pays to William Penn, the great founder of our Commonwealth, and freely acknowledge that no censure can be ascribed to him in the matter of the unjust walk or the supposed treaty of 1686, but we cannot refrain from here emphasizing Dr. Fackenthal's condemnation of Thomas Penn and his associates for the manner in which the fair and honest treaty was perverted and distorted so as to secure title to a million acres of land never intended to be conveyed under that treaty.

GALLOWS HILL—I have also been requested to discuss the origin of the names Gallows Hill and Gallows Hill Run and their history. The name seems to have been applied to the hill and stream at the time of the walk, and is perpetuated in the warrant of survey to William Ware, which embraced this site, in 1738. Jordan F. Stover in a paper read before the Buckwampun Historical Society, on this subject, June 14, 1888, under the title of "Gallows," says that the name "was applied in con-



GALLOWS HILL

HERE

EDWARD MARSHALL
AND HIS ASSOCIATES
OF THE FAMOUS INDIAN WALK
OF A DAY AND A HALF
SEPTEMBER 19-20, 1737
LEFT THE OLD DURHAM ROAD
ON THE FIRST DAY AND FOLLOWED
THE WELL-BEATEN INDIAN PATH
WHICH LED NORTHWESTERLY
THROUGH PRESENT HELLERTOWN, BETHLEHEM
NORTHAMPTON AND THE LEHIGH GAP

MARKED BY
THE PENNSYLVANIA HISTORICAL COMMISSION
AND CITIZENS OF BUCKS AND NORTHAMPTON COUNTIES
1925

TABLET ON INDIAN WALK MARKER AT GALLOWS HILL UNVEILED
NOVEMBER 21, 1925

sequence of an unknown traveler having been found suspended by a rope attached to the limb of a chestnut tree by the roadside, who had committed suicide." This seems hardly to account for the name "Gallows."

A more amusing story of the origin of the name seems quite current in this locality, to the effect that Edward Marshall, while performing the walk, broke his suspenders in jumping across Gallows Hill Run, just north of this point, and having substituted some other support for his nether garments, hung his "gallowses" on a tree at the brookside and proceeded without them. Since the deposition of Marshall in 1757, refers to this point where he left the Durham Road, by the name of "Gallows Hill," it might be argued that the name antedated the walk, but we must remember that the deposition was made twenty years later when the name became firmly attached to the place.

THE THREE TUNS INN—It is extremely doubtful whether the original "Three Tuns Inn" on the Durham Road, was located at this point. On both Nicholas Scull's map of 1759 and William Scull's map of Pennsylvania of 1770, "laid down from actual surveys" the Three Tuns is located on the Durham Road between four and five miles south of this point, and it is probably the older and better known tavern at the "Sign of the Harrow," at the present junction of the Durham and Easton roads. This was the first tavern on the Durham Road north of Tohickon and was always a noted landmark in the stage coach days. Nicholas Scull's map of 1759 also places the Three Tuns far south of this point. Whether the location is an error of the draftsmen who prepared these maps or whether the name was first applied to some other tavern, it is hard to determine. I have personally examined the petitions for every tavern located on the Durham Road, from the "Sign of the Plough" at Gardenville, to this point, from 1727 down to 1795, and those pertaining to this location down to 1875. It was extremely unusual for the name of the hotel to be given in the petition for license, prior to 1800. Even the two famous hotels of the Harrow and the Plough were seldom referred to as such in the early petitions.

The Three Tuns Inn first came into conspicuous notice when Major Samuel Brackenridge was its proprietor. On March 24, 1790, when John Barclay, Esquire, conveyed to Samuel Bracken-

ridge the site of this hotel, 53 acres and 100 perches of land, no mention was then made of a tavern. On July 4, 1791, Samuel Brackenridge entered into an agreement with John McCammon of Nockamixon to purchase of McCammon a tract of land partly in Springfield and partly in Nockamixon Township, "lying partly on the Great Durham Road, that is to say, the field adjoining the land of said Samuel Brackenridge and the said Great Road, computed to contain eight acres," and a further tract of forty-two acres on the west side of the Durham Road adjoining the lands of said Brackenridge, Jacob Fulmer, John Strawsnyder, John Moore and the said McCammon, extending equal distance along said land from the said Durham Road to make, with the said eight acres, the full quantity of fifty acres. This tract may have included the site of the old colonial inn kept by Charles Fleming and his predecessors.

At the June sessions of court, 1790, the petition of Samuel Brackenridge set forth that he "has moved to that Public House on Durham Road, formerly occupied by Charles Fleming, likewise informing your Honors that your Petitioner has purchased the same and determined with your approbation to keep an orderly house at that place." The license was granted him and seems to have been renewed regularly thereafter until the death of Major Brackenridge in 1797.

The tract conveyed by Barclay to Brackenridge was part of a tract of 196½ acres surveyed June 9, 1739, to William Ware under warrant dated April 11, 1738, described as being on Gallows Hill Run, the Indian name of which was "Perlefakon." It was patented February 14, 1744. It was an irregular rectangle lying in the extreme southeastern corner of Springfield Township, quite near the line of Nockamixon Township; its location is marked No. 72 on Dr. Fackenthal's map shown on page 22 ante. The deed from John Barclay to Major Brackenridge shows that the Durham Road intersected this tract and the Brackenridge purchase lay entirely on the east side of the road and extended down to Nockamixon line.

William Ware, the original owner of the tract, on March 8, 1765, granted to Rev. Richard Treat¹ and George Taylor² a lot

¹ Sometime pastor of Abington Presbyterian Church and a prominent divine.

² Signer of the Declaration of Independence, and one of the proprietors of the Durham Iron Works.

of one acre, ten by sixteen perches "to be holden in trust by the said Richard Treat and George Taylor for a burying ground forever. This is the old Gallows Hill burying ground on the east side of the Durham Road still in existence. This tract was later conveyed to Daniel Jamison, and Samuel McCammon in trust on behalf of the Red Hill Presbyterian Church. (See Deed Book No. 20, page 235.)

On July 26, 1766, William Ware and Jane, his wife, conveyed the whole tract to Jacob Landis, reserving the graveyard previously sold. On June 4, 1769, the same tract was sold by Sheriff Ellicott as the property of Jacob Landis to Alexander McCammon. Alexander McCammon by will dated May 18, 1776, devised it to his son, Samuel McCammon. On April 12, 1783, Samuel McCammon and Christin, his wife, conveyed the 196½ acres and allowance on Gallows Hill Run to Philip Jacobi, of Nockamixon. Philip Jacobi and Catharine, his wife, on June 7, 1787, granted 174 acres and 67 perches of the same tract to John Barclay. I failed to find any deed on record by John Barclay conveying the remainder of the tract after he conveyed the 53 acres to Brackenridge. Barclay removed at about that date to his native township of Warrington and acquiring the Barclay homestead and considerable other land in Warrington and Warwick Townships, became very prominently associated with this section, filling the office of Associate Justice of our courts for a number of years. He built the fine stone mansion at the village of Warrington, later known as the Radcliffe House in 1799, and in 1800 personally superintended the erection of the stone arch bridge over the Neshaminy at Edison. He later removed to Philadelphia, and died there in 1824.

I have been unable to trace the proprietorship of the tavern "formerly kept by Charles Fleming" as recited in Brackenridge's petition of 1790. Charles Fleming was proprietor of the Harrow Tavern in 1783 and later. I strongly suspect that the "Three Tuns" marked on the maps of 1759 and 1770, was the present Harrow Tavern, long kept by John Wilson. At the June session, 1746, George Overbeck, "living upon Durham rode four miles and a half from Durham and six and a half miles from Tohickon," presented his petition for a license. It sets forth that he

"is troubled at all hours and Commonly at unseasonable hours of the night is obliged to break his rest to entertain strangers and travellers, and all the

neighbours that lives neare the Rode suffers very much for want of a Taveron upon that Rode to lodge travellers. Especially in the winter time, by reason of the place being but newly Inhabited, fodder being very scarce that the people suffer for to supply the want of travellers so that they Desire that the Honourable Bench would be pleased to take it to consideration and be pleased to give a grant for Lycence to the above named George Overbeck, which we the undernamed know to be an honest well meaning man and is well stocked with hay and oats and all other necessities fiting for a Public house, and we the undernamed will be forever thankful."

This petition is signed by William Weear, Robart Wear, Thomas Weiar, Lawrence Pearson, Edward, Thomas, Nicholas, and Patrick Carty, Alexander McCamont, Hugh Orlton, Uriah Humble, George Fox, James Galbraith, John Hayes, John Anderson, Timothy Sullivan, Joseph Blair, John Duram, William Dickson, William Philips, Johannes Heinrich, Herman Younghand, Martin Penniger. This petition was rejected, but was renewed each year and the license granted about 1748 and 1749, and was again rejected in 1750, and yearly and semi-yearly thereafter until about 1757, when it was again granted and regularly renewed for several years. In Overbeck's petition of 1755 or 1756, he sets forth "there is no tavern on the road between Tohickon Creek and Easton, upward of twenty miles." The petition of George Overbeck in 1752 states that he "lives close to the Great Road from Newtown to Durham and Stephen Twining's Mill (now Funk's) and likewise what road we have from the river up to Saucon and the Swamp, and to many of the other Back parts of this province which occations a great many travellers."

Michael Titter (Dieter) was licensed in Springfield in 1752 and regularly thereafter until about 1765, when he was succeeded by "Sebella Titter."

"Samuel Brackenridge of the township of Springfield" presented his petition to the June sessions of the court, 1779, which "humbly sheweth, that your Petitioner hath married the widow of Jacob Booker (Kooker), who in his lifetime kept a noted Inn in said township. Your Petitioner therefore Prays your Worship would grant him the license, as a public House of Entertainment in that part of the country is very necessary." His petition was "allowed." This tavern was at the site of Springtown.

At the June sessions of court, 1761, the petition of Jacob

Kucker sets forth that he hath lately purchased the place of John Chapham in Springfield, and requests a license which was regularly renewed until his death in or about 1779.

The will of Jacob Kucker, dated May 2, 1776, devises to his wife, Susanna, his plantation of 246 acres on which he dwelt, partly in Lower Saucon, Northampton County, and partly in Springfield Township, Bucks County, bought of John Chapman. Letters of administration were granted to Susanna, the widow, and her husband, Samuel Brackenridge, on February 7, 1780.

The license seems to have been granted to Brackenridge for the year 1780. At the June sessions, 1781, John Barclay, Esquire, presented his petition setting forth that he "lives on the Plantation belonging to Samuel Brackenridge in Springfield Township, known by the name of Cooker's Tavern and Lying on the Forks of the Great Road leading from Easton and Bethlehem to Philadelphia." The petition was allowed.

Samuel Brackenridge had abandoned his tavern to enter the service in the War of the Revolution; accompanying his friend and neighbor, John McCammon, to Newtown, he enlisted in Captain Bennett's Company of the Light Horse of Bucks County. His name does not appear on the published rolls of the company, but Captain Bennett makes a certificate published in the fifth series of the Pennsylvania Archives, Volume V, page 387, which is as follows:

"I do hereby Certify that Samuel Brackenridge belonged to the Troop of Horse in the year Eighty and part of Eighty-one, and did the duty required of him.

CAPT. JACOB BENNETT."

Whether he immediately returned to the Tavern is not very clear. A number of letters written by him to Richard Backhouse appear among the Durham Furnace papers in the possession of the Bucks County Historical Society. In the account book of Greenwich Furnace (also in said collection), where a store seems to have been maintained as well as a forge, he is charged with four gallons of rum at 15 shillings on October 22, 1782, and on April 8, 1783, with fifteen gallons at 9 shillings, "if rum raises to be replaced." His name appears on the "lists of persons licensed" down to about the time he applied for the license at Gallows Run.

On February 25, 1786, there was surveyed to Samuel Bracken-

ridge a tract of land containing 129 acres 29 perches, called "Coalhill," which was patented to him August 10, 1787. This tract was quite remote from his Gallows Hill property, lying on South Mountain, northeast of Springtown, mostly in Northampton County, with but a few acres in Bucks. On January 21, 1788, Major Brackenridge conveyed this property to Richard Backhouse, who, after cutting off the timber for charcoal, for use at Durham furnace, subdivided it and sold the fee.

Samuel Brackenridge is taxed for the 210 acres in Springfield Township in 1779. His name does not appear again on the tax list until 1783 for which year no valuations are given. In the tax list of 1784, which was in the nature of a census, he is listed for 200 acres, two dwellings, one outhouse, six "white inhabitants,"—that is, there were six members of his family. His name appears also on the tax lists of 1786 and 1787.

We have no record of the commission of Samuel Brackenridge as a Major, but it doubtless could be obtained by a search of the State Militia Record.

He lies buried in the old churchyard of Trinity Reformed Church in Springfield. The inscription on his tombstone is as follows:

"In memory of Major Samuel Brackenridge
who departed this life September 8, 1797,
in the 47th year of his age."

His wife died three days later, September 11, 1797, aged 45 years and 10 months, and lies buried alongside of him.

The Gallows Hill Inn and 105 acres were sold by the sheriff as the property of Samuel Brackenridge, November 3, 1797, to Henry Dotterer, who conducted the tavern until 1802, when he sold it to Charles and David Keichline. It was again sold by the sheriff, September 27, 1816, and purchased by Jacob Keichline and continued in his possession until March 29, 1831, when it was conveyed to Jacob E. Buck, storekeeper. By this time the property had become reduced to 29 acres. Jacob E. Buck conveyed it to Thomas Miller in 1836; Miller to John Welder in 1839; Welder to Isaac Sigafos in 1842; Sigafos to Abraham Dilgard in 1846; Dilgard to Lewis S. Biehn in 1872. The name was changed from Three Tuns to Stony Point nearly a century ago, but the first post-office was given the name of Gallows.

Quarrying

By HENRY K. DEISHER, KUTZTOWN, PA.

(Doylestown Meeting, January 16, 1926)

QUARRYING is a world wide subject and the earliest operations are lost in antiquity. The word mining is another word for quarrying, to distinguish under-ground from surface operations. Considerable iron ore is found in rock formation and nearly all precious metals are extracted from rock quarried under ground.

It is difficult not to digress from our subject, because the ruins of the finished products of the quarry are so vast and interesting. Suffice it to mention the Pyramids and Obelisks, the Temples of Thebes, Philae, Memphis, Karnak, Luxor and Heliopolis, Tombs of the Kings in Egypt, the rock temples of Nubia, the mile of 1,500 pillars of Palmyra, the ruins of Baalbek in Syria, the numerous temple ruins in Java, India, Persia and Assyria, the Chinese Wall, the temples of the Aztecs in Mexico, the Maya in Yucatan and the Inca in Peru. We must not forget Greece and Rome, where the finest art was developed.

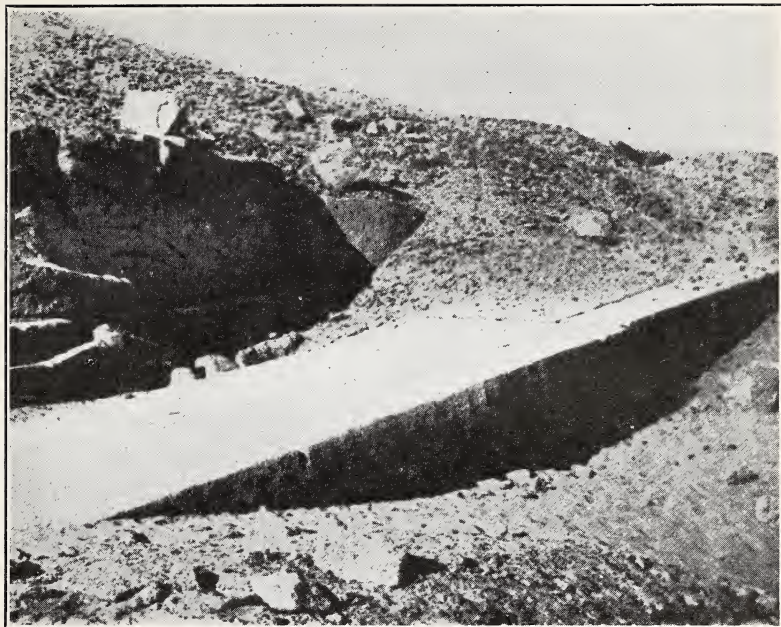
Quarrying dates from the first existence of man, the beginning of the Stone Age and lasting thousands of years. The Stone Age gave way under the march of civilization and ended on the Pacific Coast in America less than a century ago. The operations studied in our country, no doubt, may be applied to all Stone Age peoples of the world thousands of years earlier. During the early Stone Age, quarrying was carried on on a restricted scale with primitive tools. Pummeling stones for fracturing boulders, hammer stones for rough flaking and pecking and heavy wooden staves charred at one end to produce hardness for excavating earth or prying stones, constituted the principal tools.

We have examples at Macungie and Vera Cruz in Lehigh County, Pennsylvania, where a vast amount of energy was displayed by the Indians in pre-historic times. Dr. Henry C. Mercer explored excavations to a depth of forty feet at Macungie; and states, "Charcoal was found everywhere, proving that rocks were heated by fire and water thrown on to fracture them.

Evidence of charred staves for prying out rocks was also found." There are 138 pits at Macungie and 60 pits at Vera Cruz, all of considerable dimensions. At Flint Hill, Bowers, Berks County, Pennsylvania, the pits or quarries are shallow, the rock being found on or near the surface and not of large dimensions. Dr. William H. Holmes, Washington, D. C., and I found a stone weighing fourteen pounds, seven feet below the surface, worn round and bruised from throwing on rocks to reduce it to portable size. Hammer-stones worn round from use have been found in great numbers at all the quarries. At the quarries referred to the highly prized jasper was found. Near Mont Alto, Pennsylvania, are many places where Rhyolite was quarried, which was the chief supply for Susquehanna River Indians. Flint Ridge in Ohio about five miles long, is another great quarrying site.

At the dawn of civilization, whether it first occurred in China, Babylon, or Egypt, or simultaneously, the first notable operations took place in Egypt, followed several centuries later on the same gigantic scale east and north. Dates are given by historians and archaeologists, but they disagree hundreds of years, hence—who shall say? However, it may be assumed that extensive quarrying was begun in Egypt earlier than 2500 B. C. Here again is the question of tools. Copper and tin, and copper and tin as an alloy, making bronze, were discovered in remote ages, called the Bronze Age. Comparatively speaking, iron followed closely, but evidently the hardening process was not discovered early, because of tools found in the quarries, those of copper and bronze predominate. It may be thought iron tools oxidized and disappeared, but such is not the case in the climate of Egypt. Fire-setting was resorted to, only to remove waste rock. This was done by building brick walls parallel and close to the rock to be removed. A hot fire deteriorated and reduced the rock.

Until recently it was a matter of argument how the Egyptians severed the large blocks of stone in the quarries for the pyramids and obelisks. No evidence of drill-marks are found. My contention always was that they were hewn out with hammer-stones like the Indian pecked the groove around his axe for a handle hold. However, the vastness of labor was almost beyond comprehension. Only the Assuan quarry, where R. Engelbach



UNFINISHED OBELISK IN QUARRY AT ASSUAN, EGYPT

This unfinished granite obelisk lying on its bed in the so-called North Quarry near Assuan serves to show Egyptologists the manner in which these obelisks were quarried. They were blocked out from the ledges, the tops and sides dressed, and then detached from the cliffs by boring numerous holes underneath them, in which wooden wedges were driven; these were then wetted and their expansion released the granite blocks from their beds. The bottom sides were then dressed and the shafts conveyed on rollers over a massive causeway (which is still in use) to Assuan, where they were transferred to floats and taken down the Nile, where they were again moved by means of rollers to the places of destination. The unfinished obelisk shown above measures 92 feet long by $10\frac{1}{2}$ feet across at the base, and is estimated to weigh about 500 tons.

The statues, sarcophagi, columns and other large objects, used in the temples, tombs and other buildings along the Nile, were also dressed in the quarries to lessen the weight for shipment.

made recent explorations will be considered and references made thereto are taken from his writings.

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"Wedge marks are seen everywhere; some show where a block has been removed, others where the wedge failed to act, or has split the rock in the wrong direction. Wedge marks show that small slots were cut in rows to make cleavage on a specified line. The site clamors for excavation, which might well reveal chippings from chisels used in cutting the granite, and thus settle once and for all time, whether they were made of highly tempered copper or not. The action of fire is shown in many places. The topping or inferior stone was removed by fire and where projections of rock were in the way to move large blocks from the quarry, fire setting was resorted to. Evidence shows that fires were banked with brick to force the heat against the rock to be destroyed. It is believed that metal wedges were principally used, but some enormous wedge slots have been found where wooden wedges may have been used and soaked with water to expand them and force the fracture. The most essential discovery pertaining to our subject is an obelisk 137 feet in length, base 8 feet square, calculated to weigh 1,168 tons. My personal opinion is, that it was impossible then, as now, to wedge out a stone so long and slender, because it would break at any weak point, due to irregular expansion of the wedges.

"This gigantic stone has a trench all around 6 to 10 feet deep and two and a half feet wide, all bashed or bruised out, but the block is not loose at the base. Few chisel marks are found; everything rounded. Indisputable evidence proves the method employed here which was done entirely by bruising with balls of Dolorite. These balls measure from 5 to 12 inches in diameter, averaging 12 pounds in weight and are found in profusion in the quarry. It is uncertain whether these balls were used by hand or mounted on handles and used as rammers. Either way must have been a laborious job, but evidently quicker than chiseling, due to want of metal tools sufficiently hard for so big an undertaking. From a trial made in bruising it is estimated seven months double shift were required to ram out the trench. Markings indicate that two feet of space were allowed per man, and if the Dolorite balls were mounted, one man in the trench regulating the blows and two men ramming from above; thus 390 men could work on this trench at the same time. The dust which collected would have to be brushed aside frequently and at intervals removed as the cushion formed would reduce the stroke to nil."

Engelbach calculates from inscriptions on finished obelisks, that the work was done during the reign of Thutmosis III and Queen Hatshepsut, 1501 to 1447, B. C. No matter what the date of the Assuan Obelisk, the process of hardening iron was discovered later, when the steel chisel became the principal tool.

Here may be cited the little known, "Cave of the Horse Ear," on the Island of Sicily. The cave is about 150 feet wide and long, and 300 feet high, shaped like a horse's ear. It was chiseled out of solid rock, during the reign of Dionysius, the elder, tyrant

of Syracuse, B. C. 400, for the incarceration of political prisoners, numbering 300 at times. There was an aperture at the apex where a watchman could hear a whisper from the prisoners, who might plan a conspiracy. Native tradition says the number of men engaged from time to time exceeded 10,000. John H. Werner, who had a brief shore leave from a convoy ship during the World War, visited the cave and gave me this information. Pliny, about 50 A. D., refers to the tunnel driven under a mountain three and a half miles to drain Lake Fucino. Intermediate shafts no less than 400 feet deep were required for air, and to admit men to work in opposite directions, 30,000 men were occupied eleven years, all done by fire-setting, hammer and chisel.

Take a glimpse at the operations of the immense marble quarries in Italy during the early centuries A. D. We may assume that by this time channel drilling was in vogue and stones wedged out, either with wooden wedges saturated with water, calcined lime wetted and plugged in holes, or with iron wedges. Probably the same methods are employed to date. During the years, 1882 to 1890, I saw blocks of Italian marble weighing fourteen tons, hauled to the stone sawmill of Schweyer & Liess at Bowers, Berks County, Pennsylvania, which had wooden plugs or wedges sticking in wedge-holes.

Stepping forward to the Medieval Period, we find recorded that England had over 1,500 castles, Germany probably had as many, if not more, built on high cliffs. During a siege an abundant supply of water was as necessary as food. Wells were dug hundreds of feet through hard rock to the water level. Dr. Henry C. Mercer says: "These outrageous wells were all chiseled out and are more wonderful than the castles themselves." Agricola, 1494 to 1555, probably the greatest mining engineer of his time, says mining was all done by fire and chisel. History states that powder was discovered by the Chinese in early times, but no mention is made that it was applied to quarrying. Blast-ing powder was invented by the Germans in 1627, and this revolutionized the industries of quarrying and mining.

What appeared to be one of the oldest, if not the oldest mine in America, is the copper mine at the base of Bowman's Hill, about four miles below New Hope, in Bucks County, Pennsylvania, along Pidcock Creek, about three-fourths of a mile from

its mouth. Was it begun before the time of blasting? The late Captain J. S. Bailey thought the mine was opened by the "Knights of Albion," an English Exploration Company, who came up the Delaware River in 1624, or if not, then by the Swedes in 1638. About two years ago a deed for this land was found dated 1701 to John Pidcock, including the words, "to Dig Ore on." Later the Neely family came in possession of the property. Neely had heard from the Indians that the place had been opened by white men, "long ago," who came up the river in boats and carried off pieces of rock. He tried to work it, but was not successful. During 1854, one of the descendants cleared the drift and pumped out the vertical shaft. An engineer from New York went down and found another shaft. He said the mine showed signs of tools not in use for a couple of hundred years. Recently an engineer claims to have found marks of drill holes, which would indicate operations after the discovery of blasting with powder. Yet it is possible and probable that the mine passage was partly opened by hammer and chisel. Do not the drill holes indicate that the passage was enlarged by wedging out blocks, a process quicker than chiseling?

Anthracite coal was discovered in 1791 near Mauch Chunk, Pennsylvania. W. W. Morris, a Welsh miner, told me the first powder used for blasting in coal mines was redish brown and very fine as the name indicates. Later the black granular powder was developed, followed by glazing the granules as a protection against dampness and deterioration. Most of the drill-holes in coal mines were horizontal, some inclined up or down, according to dip of the vein. Due to the easy fracture of coal, the holes are not heavily charged and only lightly tamped. It being difficult to place powder in horizontal holes, the miner's squib, a tubular paper bag holding the powder, was shoved back in the drill-hole. The paper was pierced with the pin or needle, followed by light tamping, great care being taken to keep the pin loose by turning during the process of tamping. Withdrawing the pin, a rocket with saltpeter tape for lighting is inserted in the hole, which shoots a flame to the powder charge. Safety fuse has not been used in coal mines, due to smoke from burning cotton, which produces foul air.

During 1828 slate was discovered in Lehigh County, Pa., and a quarry was opened by Crump and Brereton, from Balti-

more, Maryland. In 1844 Kern, Jones and Roberts opened a quarry at Slatington, Pa., by means of a tunnel, which was operated from 1845 to 1886. In 1844 William Roberts and Nelson Labor discovered slate in Northampton County, Pa. John H. Moyer, a blacksmith and tool-sharpener, at Slatedale quarries for forty-one years, gave me the following information: "Fortunes have been made in slate quarrying, but many more fortunes have been sunk, due to the enormous expense in removing the top of inferior rock to reach quality-slate and installation of machinery." Open quarries are made where the topping is of limited thickness, as a considerable area has to be stripped. Open quarries have been worked to a depth of more than two hundred feet. At medium depth slate is generally veined in rectangular blocks, which can easily be wedged out. Where topping or poor slate extends to considerable depth, shafts are sunk and quarrying is extended to depths of four hundred feet or more. The best quality slate is found in solid bodies below water level and water pumps are in operation continually. In these deep quarries large chambers and tunnels are worked out.

Blasting is resorted to only when workings are started for a lower level. Drill holes are only lightly charged with blasting powder to prevent shattering the slate. Large blocks are then wedged out with triple iron wedges, two iron wedges called feathers are rounded on one side to fit the side of hole and are set on opposite sides and a steel wedge is driven between the feathers. A row of these drill holes and wedges several inches apart are prepared, then tapped lightly back and forth with a hammer till the stone fractures. Granite and marble blocks are detached in the same manner. Wooden pegs driven in the drill holes expand from the dampness, causing fracture, and are well adapted to slate.

For blasting in wet places a tubular tin can, holding the powder charge, also having short tube for inserting the safety fuse, the end being sealed with tallow is used. Before the time of safety fuse, the tube extended to top of the drill hole to be filled with fine powder for setting off the charge.

John H. Moyer also told me from hearsay,

"The blasting pin was a thin tapered iron rod with a ring or handle at the top to facilitate turning to keep it loose for withdrawal after tamping the drill hole with clay from the powder charge to the top. The pin hole was

filled with fine powder, to which was laid a strip of paper saturated with saltpeter, which when lighted burned slowly, allowing the operator to get to a place of safety. As an improvement, wheat or rye straw was cut and telescoped and inserted in the pin hole and filled with powder. The straw being thinner than the pin left an air space, thus lessening the force to blow out the tamping, also saving powder."

I have collected a few of these loading pins in iron, copper and wood, copper and wood being used as a precaution in striking a spark and igniting the powder. John D. DeTurk, Kutztown, Pa., said his father twisted a rag saturated with saltpeter and inserted it in the pin-hole instead of powder, but this failed, as it smothered the fire.

Safety-fuse or cotton-fuse, as it was called, was invented about 1860, but was partly a failure. Water-proofing with tallow was tried but without success. This was followed by so-called waterproof fuse, but this had many breaks in the powder line. After many trials a double-taped asphaltum fuse proved to be a success. Safety fuse was not always safe. About 1877, a sand blast at the Bowers quarry along the East Penn Railroad, failed to explode on time. Contrary to warnings from the quarry men, James Williams went to investigate. The cotton in the fuse slowly burned across a barren spot and reached powder again while Williams was straddling the crevice. Among the smoke and flying stones parts of his body were seen hurtling through the air. It was customary in those days to inform neighbors of a disaster, and I was the messenger on this occasion.

In Eastern Pennsylvania the quarrying of limestone was carried on in open pits; as an industry it dates from about 1720, supplying the early charcoal blast furnaces, the first of which in Pennsylvania was the Colebrookdale furnace. Anthracite coal was first used successfully in blast furnaces in 1840, and from that time forward quarrying became an industry of immense proportions. There were many furnaces between Easton and Harrisburg due to the proximity of limestone and iron ore. Large quantities of limestone were calcined and the lime used on farm land, and for masonry work. Throughout the limestone region nearly every farmer had a quarry and a limekiln. During the winter months farmers from great distances hauled lime with two and often four horse sleds, paying six to seven cents a bushel. Some farmers had their own kilns and hauled stone, purchased

at \$3.00 per cord. On a long stone ridge, south of Kutztown, Pa., farmers from a distance owned quarry-sites like building lots, a few had kilns at the quarry and when the owner did not have the kiln in use, it was rented at \$2.00 to \$3.00 per filling. This was economical as coal was to be had at the railroad station nearby, requiring only a short haul, and lime was not as heavy as stone for the long haul to the home farm.

Forty or more years ago, men living in farm tenant-houses as well as laborers from villages, would contract to quarry limestone during the winter months at \$1.00 per cord, the owner furnishing tools and blasting powder. Rectangular stones were sorted out for foundation walls for which the quarry man was paid \$1.25 per cord. From ten to forty cords of stone in a quarry was a common sight. The drilling for blasting was all done by hand, either single handed with a rammer drill, or one man turning the drill, his partner striking with a six-pound hammer. In dry drilling the dust was removed with a spoon-like rod called a scraper. The wet process is considered an advantage, as the slush has less resistance and fewer removals. The slush was removed with a hickory stick, one end pounded into shreds, called swab-stick. The general rule for loading a drill-hole is to fill one-third of the depth with blasting powder, then insert the fuse well into the powder. A small quantity of damp clay was dropped in the hole at a time and the clay well tamped with a tamping rod. Before the time of matches, the steel with flint and tinder or punk had to be used for lighting the saltpeter strip then in use. Besides the tools named, the crow-bar played an important part, acting as an assistant to wedges in separating fractured rocks after blasting, also for raising heavy blocks of stone.

My father operated two quarries and seven limekilns from 1856 to 1890. Quarrying was fascinating to me from early boyhood, and if father had caught us boys burning up yards of fuse and pounds of powder, there would have been stirring times. In those times pea coal sold at \$2.90 to \$3.40 per ton. Since the high price of coal and labor, the limekilns have collapsed from frost and the quarries are overgrown with trees and weeds.

In quarries where thirty to forty men worked to supply furnaces with limestone, operations were somewhat different from those I have described. On top of the bank a row of holes two

inches in diameter were drilled, ten feet apart and twelve feet back of the breast or precipice of the quarry to a depth of about twenty feet. Short drills and two men were occupied in starting. Later a platform was raised having two men on top and two below, generally using a rammer drill, but I also saw two men below lifting and turning the drill and the men above striking with nine-pound hammers. These holes, five or more, were lightly charged with blasting powder in order to run a crack or crevice from one hole to another and not tear up the rock. According to judgment from 250 to 1,200 pounds of blasting powder was poured into this crack and a fuse set about one-third distant from each end thereof, and the crack was then filled with dry sand. If the judgment of the quarry boss was correct, this blast would tear up and throw many tons of rock into the bed of the quarry. This was called a sand-blast. Pieces of limestone too large to be broken with sledge hammers, were drilled to a depth of from twelve to twenty-four inches, according to their sizes, and charged with powder to shatter them.

This paper was not intended to cover the time when high explosives came into use, but it may not be out of place to refer to the gigantic tunnel operations for which, since 1861, steam and compressed air drills and recently electric drills are being used. Among these large operations might be mentioned the Croton aqueduct, the destruction of Hell Gate, the Panama Canal and the Hudson river tubes. Several months ago I witnessed, at close range, the discharge of a quarry blast using two tons of dynamite. A blast was made at Ayer in the state of Washington, where 354,000 pounds of explosives were used, which displaced 300,000 cubic yards of earth and rock. The removal was done by modern steam shovels, taking fourteen tons at a bite and repeating the operation every forty-five seconds. I have briefly referred to some of the modern methods, which may be antiquated in a single generation, and who knows, that with the march of civilization, fifty years hence, mountains may be removed by faith.

Pioneer Life in Maine in 1808

By MRS. SOPHIE LYMAN PRATT, DOYLESTOWN, PA.

(Doylestown Meeting, January 16, 1926)

THIS can hardly be dignified by the name of a paper, but a few facts gathered concerning an early pioneer family breaking their way through the wilderness of Maine in the year 1808, are worth recording. On October 1, 1922, my sister and I journeyed to the White Mountains, about twenty-five miles north of Portland, Maine, and equally distant from Poland Springs, at Dyke Mountain Farm, Sebago, Maine, in a house which was built in the year 1853. Under these conditions we were in a mood to listen to the tales of its early history as it was related to us by a very real character, the oldest surviving member of the family, then ninety-six years old; she was bright and enjoying good health, but her sight was a little dim. Mrs. Asenath Winthrop, the youngest of her nine children, could vividly remember the earliest of her parents' experiences as they were told to her when a child. They told her of their pioneering, settling and making a home for themselves, and the gradual growth of a settlement in that then rugged country, but now one of the "Playgrounds of America."

Go back with me to the year 1808, for a few moments, in which year this family, consisting of father, mother, brother and child five years old, who migrated from Massachusetts by packet boat from Boston to Portland, and from there traveling twenty-five miles through an uninhabited territory; the mother carrying the child on horseback with an open saddle (not a pack saddle), of which distance the last three miles were through an unbroken wilderness, where they were obliged to fell trees four feet in diameter as they pushed on toward their quest. Probably no such trees are to be found today in that part of the country.

I asked Mrs. Winthrop, my informant, how her family knew just where to settle and make a home; she explained that they were looking for a site that would be sheltered from the wintry blasts, with plenty of sunshine and on high ground, and, of course, where they could get water. At one time, however, they had

to dig down sixty feet for water. They did not blast the frozen ground, but after drilling holes in the rock they put coarse gunpowder in them, then lighted on top.

They raised their own cattle, beef, sheep and chickens. They also grew flax and spun and wove and made their own clothing. Shoemakers would come to their house periodically to make their shoes out of leather which they themselves had tanned. For light they would put melted mutton tallow in a saucer and would light the end of a twisted rag that hung over the side, which they ignited by means of a flint and steel; later they used tallow candles, at first made by dipping wicks into the melted fat, and later by using candle moulds. For their first fences they used stumps of trees for posts, on which they laid split pine rails. They also made fences by planting posts and inserting pine rails about eight feet long. Later they also built stone walls for fences. They hauled roots of big trees L shaped, to the ship yard to make keels for ships. They ploughed, hauled and traveled with oxen, using wagons somewhat like ox carts now in use.

Mrs. Winthrop, the present owner, was born in a frame house, (not log), the wood-shed, barn and other outbuildings were not connected with the house, as is usual in New England. The doors and windows of the house were the same as all houses of that period. The door-latches were made of iron with strings attached, and the chimney was built at the end of the house. The roofs were of shingles which they split out by hand. They cut the wood the proper length, and rived the shingles on the spot, using a frow. At first they cooked in the open fire, but when cook stoves were introduced, about 1840, they used one, which of course burned wood. For baking bread, the present owner used a brick bake-oven attached to the present house, built in 1853, until about thirty-three years ago. They used a so-called tin kitchen for roasting meat up to about forty years ago. Their corn, wheat, rye and barley were taken to the gristmill to be ground. In winter they used snow shoes.

If Mrs. Winthrop is still living, she would be one hundred years old. Her grandfather was mate on a ship bound for Algiers, carrying tribute money. The chest which contained the money, made of mahogany, was afterwards sold.

A Lutheran Mission in Northampton Township in 1748

By WARREN S. ELY, DOYLESTOWN, PA.

(Doylestown Meeting, January 16, 1926)

TWO miles south of Richboro in Bucks County on a country road leading to Middletown a short distance below what is known as the Holland Road, but known in early records as the "Road to Robert Heaton's Mill" at Rocksville (Holland P. O.), is an old stone-walled graveyard, now locally known as the Feaster Burying Ground. It consists of one acre of ground, which John Van Horn of Northampton township, by deeds of Lease and Release bearing date the 17th and 18th days of June, 1748, granted and confirmed unto Christian, Barnet, and Abraham Van Horn, all of Northampton township, and to their heirs and assigns.

These three grantees executed a deed or declaration of trust, dated June 18, 1748, setting forth that they "declare, testify and express that they stand seized and intended of and in the said lot or tract of land, in trust for the use, benefit and behoof of the Religious Society of People Distinguished by the name of Lutherans and no other."

After the death of Christian Van Horn, the first named of the three trustees, which occurred on November 23, 1753, as shown by his tombstone in the old graveyard, Bernard and Abraham Van Horn, the other two trustees, on November 16, 1762, nominated Godfrey Van Duren, son-in-law of the said Christian Van Horn, as a succeeding trustee.

On June 14, 1791, this Godfrey Van Duren, then of Southampton township, blacksmith, as "Surviving trustee of the Religious Society of People belonging to Northampton Township in said County of Bucks, distinguished by the name of Lutherans, executed a deed of trust naming Isaac Van Horn of Northampton township and John Van Horn of Solebury township as succeeding trustees and conveyed to them the same one acre of land, reciting the title as above given. See Deed Book, No. 26, page 347, etc.

This one-acre tract is a part of a tract of 1,000 acres lying in a bend of the Neshaminy Creek and extending back in an L-shaped form to the Bristol Road, marked on Holme's map in the

name of Christopher Taylor. It was purchased in 1703, by Barendt Christian and Peter Lawrence, a son and step-son of Christan Barendtse, the founder of the Van Horn family in America. It was partitioned between the two purchasers and the part set apart to Barendt Christian was conveyed by him to his two sons, Peter and Christian Barnson, the latter being the Christan Van Horn, first above referred to. This Christian Van Horn conveyed that part of the tract in which the graveyard is included, to his son John, and on February 24, 1748, conveyed to his son-in-law, Godfrey Van Duren, forty-one acres adjoining the graveyard. In his will, dated June 18, 1748, the same day as the execution of the deed for the graveyard and the Declaration of Trust above mentioned, he devised this same tract to his daughter, Charity Van Duren. It is described as located on the road to Robert Heaton's Mill, and adjoining the graveyard and the land of his son, John Van Horn. The will mentions sons, Bernard, Henry, John and Christian, and daughters, Charity Van Duren, wife of Godfrey; Ann, wife of Cornelius Corson; Catharine, wife of Henry Hagaman, and Jane, wife of John Hagaman. The will of Abraham Van Horn, dated February 7, 1770, names sons, Barnet, Jeremiah, Abraham, Jacob, David and Isaac, and daughters, Mary Krewson and Charity and Martha Vansciver.

The Van Horn tombstones, now visible in the the old graveyard, are those of Christian and his wife Williamkee, both born in 1681, he dying in 1753 and she in 1760; Christian, their son, born August 21, 1728, died December 17, 1755; a grandson, Isaac, son of John, born 1764, died March 6, 1813; another John, born 1734, died February 15, 1817; his wife, Catharine, born 1739, died October 31, 1804; Cornelius, born 1767, died February 10, 1804, and George Van Horn, a private in Co. G, 128th Regiment Pa. Vols., who died recently at the age of 71 years.

There are fifteen Hagaman tombstones ranging in date of death from 1822 to 1884: Henry Shepard, April 14, 1860, aged 82 years; Mary, his wife, October 2, 1850, aged 33 years; William Croasdale, 1783-1847; Henry C. Hibbs, 1823-1872; Richard V. Dyer, 1820-1898; Martha, his wife, 1819-1878; Theodore Morris, 1808-1836; Maria, his widow, 1791-1838; Susannah Johnson, 1813-1847; William F. Johnson, 1819-1887; his wife, Matilda,

1821-1901, and their daughters, Anna and Susanna. There are thirty-one Feaster tombstones ranging in date of death from 1771 to comparative recent dates, the oldest being John Feaster, 1706-1773, and Rachel, his wife, 1703-1771.

It seems rather strange to the historian familiar with the religious history of Bucks County that there should have been an attempt to establish a Lutheran congregation in lower Bucks, in the very center of the section settled almost wholly by Hollanders who were practically all members of the Dutch Reformed Church of North and Southampton, established on the Neshaminy in 1710. The Van Horn family, however, early divided their religious affiliations, becoming Quakers, Baptists and Presbyterians, two or three of them becoming noted ministers of the Baptist faith.

Christian Van Horn, the patriarch among the founders of this colony of "People distinguished by the name of Lutherans in Northampton township," was as before stated a son of Barendt Christian, and grandson of Christian Barendtse, the emigrant.

Christian Barendtse came from the town of Hoorn, on the Zuyder Zee about twenty-five miles from Amsterdam, Holland, to New Amsterdam prior to 1653 in which year he was appointed a burgomaster and schepen of the town. He was active in the public affairs of the Dutch Colony, filling many responsible and honorable positions. He was one of the force sent to subdue the Swedish settlements on the Delaware in 1654, and in 1656 acquired a tract of land on the present site of Wilmington, Delaware, and died there of Marsh fever while erecting a tidewater mill, July 26, 1658.

Jannetje Jans, the widow of Christian Barendtse, returned immediately to New Amsterdam, and on September 12, 1658, less than two months after the death of her first husband, married Laurens Andriessen Van Buskirk, by whom she had several children. As above stated her sons, Barentse Christian and Peter Lawrensen, purchased the 1,000 acres in what is now Northampton township in 1703. Barendtse Christian purchased several additional tracts in the Holland district of Bucks County, owning at one time practically 1,500 acres there. He, however, never came to live in Bucks County but died in Bergen County, New Jersey, in 1726. In 1707 as already stated he conveyed the Northampton township tract to his sons, Peter

and Christian Barnson. In 1714 he conveyed another tract to his son, Barnet Barnson. All three of these sons came to Bucks County, and like the other Hollanders of the third generation in America, abandoned the custom of taking their father's christian name as a surname and like many others took the name of Van Horn from the birthplace of their grandfather in Holland.

Christian (Barendtse) Van Horn was born at Bergen, New Jersey, October 24, 1681. He married there Williamkee Van Dyck, daughter of Jan Tomasse Van Dyck, later a landholder in Bucks County. After living for some years on Staten Island, Christian Van Horn removed to Bucks County. He deposited a certificate from the church on Staten Island at the organization of the Dutch Reformed Church on the Neshaminy in 1710, under the pastorate of Rev. Paulus Van Vlecq, who later married his granddaughter. Christian Van Horn was a member of Provincial Assembly of Pennsylvania, 1723-1732 and 1734-1737, thirteen years in all, and was otherwise prominent in public affairs, being a large landholder in Middletown, Bensalem, Newtown and Southampton in addition to his home township of Northampton.

Charity, daughter of Christian and Williamkee Van Horn, was baptized at the Dutch Reformed Church of Neshaminy in Bensalem, May 21, 1710. The date of her marriage to Godfrey Van Duren is not known to me but it was soon after or about 1745, at least before February, 1748, when her father conveyed to her husband the forty-one acres of land in Northampton township.

It is possible that the establishment of a Lutheran congregation in Northampton had its inception with the Rev. Henry Melchior Muhlenberg, who became very active in building up and stimulating all the Lutheran churches in our section on becoming pastor of Augustus Evangelical Church at the Trappe in Montgomery County in 1742, but was doubtless largely due to the fact that Godfrey Van Duren was a son of Reverend Johan Bernhard Van Duren, or Van Thieran, as it is sometimes spelled, whom it is known had appealed to Muhlenberg for assistance in securing the pastorate of a church. Doctor Muhlenberg was likewise the sponsor of Johan Albert Weygandt and had him with him at the Trappe for a time before securing for him charge

of the Lutheran church at Raritan, New Jersey, in August, 1749, where Van Duren had been preaching for some years. Weygandt married Rev. Van Duren's daughter Dorothy about 1750.

Rev. Johan Bernhard Van Dieran was a native of Konigsberg, Germany, and came to New York about 1717 with credentials from Rev. Mr. Boehme, court preacher at the chapel of St. James in London, whom he had impressed as a youth of good parts and an ardent religious zeal. His avowed object was to teach and prepare for the ministry. He was a tailor by occupation and secured work at that trade on his arrival in New York in the same shop with Johan Michel Schutz, a deacon of the Lutheran congregation in New York, then under the pastorate of Rev. Justus Falkner, who also was interested at first in aiding Van Dieran in entering the ministry. He probably taught school for a time and sold books entrusted to him by Doctor Boehme.

Rev. Joshua Kocherthal, who had arrived with his flock of Swiss and Palatinates in 1710 and removed with the greater part of them to Schoharie, New York, died in 1718 or 1719, and Van Dieran, making it appear to the congregation that he had been ordained by Dr. Boehme succeeded to the pastorate and preached there until 1723, when the Schoharie colony, being deprived of the land assigned to them, removed to Tulpehocken, Berks County, Pa.

Parson Van Dieran had promised to come to Tulpehocken with the colony and act as their pastor there. He, however, did not do so though he visited them at intervals and officiated as a pastor. It appears that he had previously visited the Lutheran church of Falckner Swamp in New Hanover township, Montgomery County, some years before the settlement at Tulpehocken and is charged with claiming that he had been ordained by Rev. Anthony Jacob Henkel, the pastor of that church. On the recommendation of Doctor Falckner he had also appealed to the Swedish ministers in New Jersey and Pennsylvania for ordination in 1721. He had married Mary, a daughter of Johan Michel Schutz, in 1721, a maid of fifteen years, and her father became an ardent partisan of Van Dieran. Rev. Justus Falckner was growing old and feeble and the Van Dieran supporters were planning for Van Dieran to succeed him. Falckner realizing this fact and not considering him a safe person had secured the

promise of his elders that they would apply to the Consistory at Amsterdam to send them a successor in case of his death. Falckner died in 1723 and Van Dieran immediately left Schoharie and came to New York, and the faction favorable to him began their efforts to have him selected as pastor, but the elders, despite the opposition of Schutz and his friends, asked the consistory to send them a pastor. The consistory replied that they could not at once secure a suitable man. Van Dieran seems to have been preaching irregularly at New York and elsewhere, and on receipt of this communication Schutz, securing the endorsement of a few influential members of the congregation and about forty others not closely identified therewith, wrote to the consistory that the council of the church had decided to call Reverend Van Dieran and they need not seek further for a minister. However, before this letter reached them the consistory had secured a candidate and examined and ordained Wilhelm Christopher Berkemyer, who was already on the way to New York when the Schutz letter was received. When he arrived and learned what the Schutz-Van Dieran party had done he became at once an inveterate and remorseless enemy of Van Dieran, which lasted throughout the balance of their lives. He prepared a pamphlet printed by Zenger, the famous printer who was the defendant in a libel suit for publishing criticisms of acts of public officers and defended by Andrew Hamilton of Philadelphia. In this pamphlet he charged Van Dieran of many offences against the laws of the Lutheran church, among them that he cut the bread used in communion service with a knife instead of breaking it.

Van Dieran became pastor of a congregation at Hackensack, but was finally driven out as result of Berkemyer's persecutions. He next went to Raritan, Somerset County, New Jersey, where he preached for some time, being succeeded by Rev. J. A. Weygandt in 1749, the latter marrying his daughter Dorothy in 1750.

The appearance of Godfrey and John Van Deren in Bucks County about 1745, both sons of the wandering preacher, may have stimulated the effort to start a Lutheran congregation in Northampton where Godfrey was living and in which he enlisted the assistance of his wife's wealthy and influential relatives. On the records of the Lutheran Church at the Trappe between the years 1750 and 1760 appear the baptismal record of several

persons, as "baptised at Neshaminy." These include several members of the Van Horn family, a daughter of Godfrey and Charity Van Duren and a number of others including that of Bernard Hellyer, the ancestor of the Hellyer family of Doylestown and elsewhere in Bucks County. This would indicate that there was a chapel or meeting place of some kind on the one-acre lot, but there is no further evidence of this fact. The reference to the lot in deeds of adjoining lands always mentioned it as a "graveyard."

Godfrey Van Duren and his wife Charity removed to Solebury about 1750, and he was for several years proprietor of the tavern at Ruckman's and conducted a blacksmith shop adjoining. The deed by which they conveyed the forty-one acre farm to Adrien Cornell in 1751 was made while they were residents of Solebury. He returned to Northampton township prior to 1760 and acquired other lands, but finally settled in Southampton where he died in 1792.

His occupation while in Southampton was that of a "Nailer" and the inventory of his estate lists machinery or tools for the manufacture of nails. His wife Charity died and he was married second at Southampton Baptist Church by his wife's relative, Rev. William Van Horn, in 1780 to Alice Evans, who survived him. His only son Bernard married Margaret Murray in Bucks County, but soon after his marriage removed first to Loudon County, Virginia, and later to Kentucky. A daughter of Godfrey and Charity married John Hough of Warminster, who settled his father-in-law's estate in 1792, but soon after removed to Kentucky. Another daughter married Isaac Longstreth, having become a member of the Society of Friends at Horsham.

John Van Dieran, a brother of Godfrey, came to this section while a minor about 1740, and was probably an apprentice to Thomas Holcomb, who built the Pine Run mill in 1742. He sought and obtained membership in Buckingham Monthly Meeting of Friends in 1746, and soon after married Susannah, daughter of Thomas Holcomb. Soon after his marriage he removed, first to Horsham and later to Roxborough, Philadelphia, where he owned and operated a mill until his death about 1786. His son Charles was a soldier in the Revolution and father and son took up several large tracts of land in different

parts of Western Pennsylvania, where his other sons, John and Charles, were living at the time of their father's decease.

Godfrey Van Duren was a soldier in the Colonial service in 1756 and also in the Revolution.

Rev. John Bernard Van Dieran, the father, died about the year 1760, and his wife Mary married George Roreback of the Raritan section, who had previously married her sister. The will of John Van Duren mentioned "My honored mother M—— Roreback."

The death of Rev. Van Dieran and the defection of others of the promoters of the Lutheran congregation probably defeated the hopes to establish a church in Northampton. This zealous preacher was probably much more sinned against than sinning. He seems to have always been popular as a preacher. The difficulties thrown in the way of his receiving ordination probably led him to pretend to have received the same when he had not. His chief accuser, Berkemyer, was actuated by jealousy and his charges are largely trivial as viewed by the layman, being mostly that he did not conform to rules of discipline and practice of the Lutheran church.

On June 19, 1819, Isaac Van Horn, the survivor of the trustees of the one-acre lot named by Godfrey Van Duren in his deed of 1791, made another appointment of trustees as shown by an instrument recorded in Deed Book 48, page 13, by which he recites the title back to the deed of John Van Horn in 1748 as given in these pages, the death of his co-trustee, John Van Horn, and as "Surviving Trustee for the Religious Society of People belonging to Northampton township distinguished by the name of Lutherans," names Aaron Feaster, Abram Van Horn and Lewis Hagerman as succeeding trustees, "in place of said deceased Friends and Trustees to do any act and deed which the said John Van Horn and myself by virtue of said power and trust might or could have done," etc.

I made no further search for later appointed trustees, my sole object in preparing this paper being to record the attempt to start a church nearly two hundred years ago. However, I wish to add that David Feaster by will dated August 30, 1871, and probated June 18, 1873, bequeathed \$1,500 to the trustees of the Reformed Church at Addisville, (formerly the Dutch Reformed Church) on condition that they "obligate themselves

in such manner as my executors think proper to keep the graveyard wall and gates around the graveyard known as the Feaster and Hagaman Burying Ground, together with the covering of the said walls in good order and repair forever."

Thus some one was far seeing enough to arrange for the permanent preservation of the last resting place of these loyal old patriarchs in a sensible manner.

Preserving "Summerseat"

By THOMAS B. STOCKHAM, MORRISVILLE, PA.

(Morrisville Meeting, September 25, 1926)

HERE at "Summerseat," in Morrisville, Bucks County, the Bucks County Historical Society held an interesting meeting on May 26, 1903. At that meeting Dr. Robert S. Dana read a paper entitled "Morrisville and Its Vicinity," and Dr. Richard H. S. Osborne read a paper entitled "Historic Summerseat." These two papers are full of interesting facts relating to the historic lore of this community.¹ You will bear with me in quoting Dr. Osborne's list of owners of this historic country-seat, which shows the care that was taken by its private owners throughout many generations.

Dr. Osborne says: "The early records indicate that the lands of Summerseat formed a part of a certain property of John Wood, an Englishman, who settled in Bucks County in 1678, and took up 478 acres of land opposite the falls. The succession of owners from 1678 to 1859 is as follows: 1678, John Wood; from 1684, John Ackerman; 1687, Joseph Wood; 1723, Josiah Wood; to 1770, William Wood; 1773, Thomas Barclay; 1791, Robert Morris; 1798, George Clymer; 1805, Henry Clymer;² 1813, Elizabeth Waddell; 1859, John Humphrey Osborne."

This property remained in the Osborne family until December 15, 1919, when the late Mrs. Ada I. Osborne, wife of Dr. Osborne, sold it to Isaiah Burks, and on September 4, 1920, Mr. Burks conveyed it to the Washington Heights Realty Company, and that Realty Company has since sold it to the Morrisville School District, deed recorded August 7, 1922.

Referring to one other historical fact not related in either one of these papers, and before taking up the subject of preserving this mansion, I would direct your attention to a letter written by General John Sullivan to His Excellency George Washington, January 10, 1781. This letter was brought to my attention by Dr. Carlo E. Godfrey, Director of the Public Record

¹ Bucks County Historical papers, Vol. III, pages 237 and 242.

² Henry Clymer was the son of George Clymer, and there in the home of his son, George Clymer, passed away January 23, 1813.

Office, of the State of New Jersey, who is as deeply interested in the historic facts of Pennsylvania as he is of his own State, and who told me that this letter was in the Library of Congress. I wrote to the Librarian of Congress and received a photostatic copy of the same, and I hope that when this building is restored to its former integrity to have a framed copy of this letter hung somewhere on these hallowed walls. The letter reads as follows:

Barclay's House (near Trenton) Jan. 10, 1781,
8 o'clock Eveng.

Dr. Sr.

We are Happy to inform your Excellency that the terms offered to the Pennsylvania troops are at length finally and as we believe cordially and satisfactorily agreed on, and tomorrow we expect the Pennsylvania lines will be arranged in its former order, Constitutionally, no Concession has been granted them that the critical situation of our affairs did not Warrant and Justice dictate.

As an earnest of their sincerity they have this night sent to us under a strong guard the two spies sent out by Sr. Harry Clinton with offers of terms to them, who are now in the House under a guard of the Philadelphia Light Horse, and a Court Consisting of Genels Wayne & Irvine Cols. Butler Steward & Majr. Washburn at this Moment determining their fate. Several other Emissaries have been sent out by Sr. Harry, who have more prudently delivered their Credentials to us, whether more Honestly time will determine. In short the whole progress of this affair exient the first Tumult has been conducted on their part with a consistency, firmness and a degree of Policy mixed with candor that must astonish every theorist on the nature of the American Soldiery; and cover Sr. Harry with Shame and Confusion, if not stigmatize him with the appellation of Prince of Blunderers, for having so illy succeed in essays of this kind.

Commissioners appointed by the Committee of Congress Consisting of Col. Atles, Gen. Potter, Mr. Blair, McClaneghan and Capt. Morris of the Philadelphia Lt. Horse will proceed tomorrow to adjust their Claims.

Jan. 11 8 of Clock A. M.

The British Emissaries are Condemned & will be Executed this morning at nine. The Commissioners are now Sitting to Determine which of the Troops, ought to be Discharged and which to remain & we Trust this Day will Complete the Business. I have the Honor to be most respectfully Dr. Genl. your Excellency's most obedt. Servt. by order of the Committee.

JNO. SULLIVAN,
Chairman.

To His Excellency,
General Washington.

Since the last meeting of this Historical Society in Morrisville, the greatest war of all history has been fought. Since the eventful sojourn of Washington within these walls in the early days of December of 1776, since the visit of Lafayette to this venerable country seat in 1824, events have led this great nation to a position in the eyes of the world that precludes the possibility of a continued isolation as laid down by the Father of his Country. Science and invention have made all the world a kin and the spirit of the trying days of the conflict which made this soil hallowed, the plans that were undoubtedly laid within these walls and the events that followed to the turning of the tide of battle, the raising of the hopes of a people sorely pressed and depressed by defeat has reached across a century-and-a-half and the sons of these gallant men enacted similar scenes upon the soil of their forefathers in old Europe, and have raised the standards of Democracy in the old world.

Trenton and Morrisville have a heritage as great; and the spirit that turned the tide of war in the Revolution has carried on, and under the stars and stripes, shoulder to shoulder with the bars of France and the cross of Saint George of Great Britain, made Chatteau-Thierry the second Battle of Trenton.

We should preserve Summerseat. The boys returning from France in the early formative period of the American Legion, turned to find a home and ventured to buy this property; young and impetuous, back from the great strife, full of vigor, with none of the spirit of serenity that surrounded these sacred walls, ventured to turn this building into a club and quarters for their organization. The task was too great for them and finally they had to abandon the project. Such damage as was wrought in turning the second floor into an auditorium is not beyond repair. These walls can be restored and the early integrity of the building thus preserved.

A fast-growing community turned its attention to the needs for better school facilities and prompted the Board of Education to take over this entire block with a view of retaining this house, and building a school on the adjoining grounds. The tremendous demands placed upon the School District for improved school facilities made it impossible for the School Board to expend any funds on the restoration of this historic house. The fire hazard and the rapid depreciation of the property in an

unused condition after having been used as a school house, to relieve the congestion during the period that the Robert Morris school was being built, caused the board to consider very seriously the demolition of this structure. The Morrisville Chamber of Commerce stepped into the breach at this point to stay the hand of destruction until something could be done. The board very graciously consented to this request and gave the Chamber of Commerce a certain time to carry out its plans. In the meantime this committee of the Chamber of Commerce has raised funds to seal up the hole in the north wall of the building as their contribution to this work and this bit of restoration will be completed before the winter sets in.

This building on this site is not Morrisville's, is not Bucks County's, is not the Commonwealth's, but the Nation's own. Mount Vernon, the historical shrines of Boston, Tennet Church, Yorktown, Valley Forge and Washington Crossing are national shrines and "Summerseat" belongs side by side with them. Washington's headquarters were in this building from December 8 to 14, 1776, and I am of the opinion that within these walls he planned the battle of Trenton.

Scripture tells us that at a certain great battle the Israelitic leader had the veil removed from his eyes that bound his sight to those things that were earthly and saw standing on the hills, legions of angels, ready to strike in his behalf. The knowledge that they were there was sufficient to spur him on to victory with the human forces at his command; perchance the spirits of the legions that wended their way up to the Pennsylvania shore of the Delaware river and across the icy stream at Washington Crossing appearing before the Hessians on the 26th of December in that historic battle were perhaps in France at Chatteau-Thierry, and there to encourage the spirit of the boys of the great American Division that whipped the Hessians again, swept them off their feet and turned the tide for democracy.

May there be pulled aside the veil that blinds us and confines our vision to things material, and upon this occasion view those same legions before us, and say, "these walls shall not fall"; that we will make this a shrine the equal to any within the country and restore this house to its rightful heritage and preserve it for posterity. Here was developed a great strategic plan under the direction of a genius and by the guidance of a good



"SUMMERSEAT"

Rear view looking east--From photograph taken 1931, after restoration

God who has made this the greatest nation on earth; and our act in thus preserving "Summerseat" will bring to the attention of a great people their great debt to him who was "first in war, first in peace, and first in the hearts of his countrymen": to the one great stroke that made Washington feared and respected by the enemy, to the one great event that fixed the destinies of the whole world. Here was the birthplace of the thought, here was reared the child of action, who struck, yonder across the river, that blow which stunned an Empire.

This should be made an hallowed place, another great shrine to remind us that a good God guided the hands of a great man and is the one who rules our destinies.

POSTSCRIPT

On January 7, 1930, the Morrisville School Board commissioned Mayor Stockham, the author of the above paper, to prepare plans for the restoration of "Summerseat" to its original lines, to be used as a home economic department of the Morrisville High School, which stands near by on the same grounds. After much research and study, plans were prepared, and the building now stands restored, as near as has been possible, to its historic lines. The restored building was formally dedicated on March 24, 1931, at which time the Board of Education gave a dinner to an illustrious gathering of about forty-five people.

Biographical Notice of M. J. Allan Emory, Esq., A. M., LL. B.

By B. F. FACKENTHAL, JR., SC. D., RIEGELSVILLE, PA.

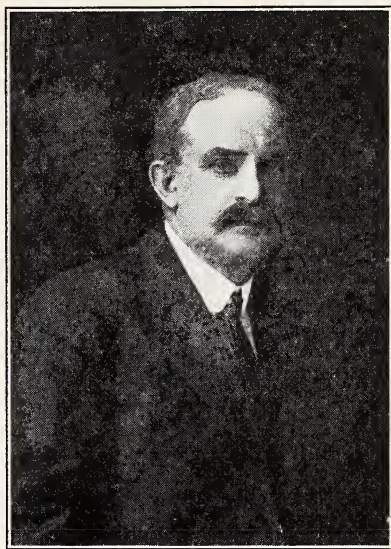
(Morrisville Meeting, September 25, 1926)

IN the passing of Allan Emory this society has lost a valued member, one who took an intelligent interest in its welfare; every feature of which was of interest to him, with its history, folklore and archaeology.

He was the son of Rev. William S. Emory (originally spelled Emery), who was born at Uniontown, Fayette County, Pennsylvania, March 9, 1818, and Martha Row, daughter of Colonel Jonathan and Mrs. Maria (Minium) Row, who was born January 6, 1824, at Greensburg, Westmoreland County, Pennsylvania, where she was graduated at the Greensburg Female Seminary. She passed away at Frenchtown, New Jersey, December 30, 1907, in the eighty-fourth year of her age.

The Reverend William S. Emory (father of Allan) began his college career by entering Jefferson College, Class of 1836, which in 1865 was united with Washington College to form Washington and Jefferson; leaving that institution he entered Madison College, situated in his home town, at Uniontown, Fayette County, where he was graduated with the degree of A. B. In 1849, Jefferson College conferred upon him his Master of Arts degree. He then entered the Seminary at Columbus, Ohio, where he took a post-graduate course, making the study of German a specialty. This served him in good stead in after years when he was called upon to preach in both English and German, which he could do with equal fluency. He then entered the Lutheran Seminary at Gettysburg, Pennsylvania, from which he was graduated in June, 1844. He was first licensed to preach by the English Evangelical Lutheran Synod at Wooster, Ohio, September 5, 1844, which license was renewed October 4, 1845, by the English Lutheran Synod at Allegheny, Pennsylvania. He was ordained to the Christian ministry, December 12, 1845, at Sinking Valley, Huntington County, Pennsylvania. He served charges in Huntington, Westmoreland, Indiana and Lebanon Counties in Pennsylvania. In December, 1865, he accepted a call to Bucks County, Pennsylvania, and in March, 1866, moved with his family to Kintnersville, in that county,

where he served a large charge consisting of four Lutheran congregations, worshipping in Union churches, viz.: Springfield, Durham, Nockamixon and Tinicum; and at the same time preached occasionally in other nearby churches, which had no regular pastors. He continued to serve this charge until 1880, when it was divided and he was assigned to the Nockamixon and Tinicum churches. Shortly thereafter he moved to Erwinna in Bucks County. His health failing, he retired from the active ministry in 1884 and moved to Frenchtown, New



ALLAN EMORY

Jersey, where he passed away, May 1, 1890, in the seventy-third year of his age. During 1875, he and the Reformed pastor, the Reverend David Rothrock, were instrumental in building the new and enlarged brick church at Nockamixon, which stands on beautiful grounds near Ferndale in Bucks County.¹ The Reverend Mr. Emory's loyalty to his church is shown by the fact that for a period of forty-three years he did not miss a single meeting of its synod, and over the same period of time missed attending the conference but a few times, and then only on account of sickness.

Allan Emory, the subject of this notice, was born in West Newton, Westmoreland County, June 8, 1848. As a lad he attended the public schools of West Newton and Indiana, Indiana County, where his father served charges. In April, 1862, the family moved to Palmyra, Lebanon County, where Rev. Emory ministered to a Lutheran charge, consisting of four congregations, until 1865. While living in Palmyra, Allan was employed as a telegraph operator, and happened in the telegraph office on the night of Good Friday, April 14, 1865, when the sad

¹ The Lutheran congregation at Nockamixon was established probably as early as 1755. The new brick church erected in 1875 is 42 feet by 78 feet 4 inches.

intelligence was flashed over the wire telling of the assassination of Abraham Lincoln. He was not on duty that night, and although the office was equipped, as all small telegraph offices were at that early day, with an old-fashioned tape-registering instrument, Allan, who had learned to read by sound, easily read the message, which passed through the Palmyra office saying "Lincoln is shot," but could not get any further information for several hours.

In 1865, Allan entered the Academy at Gettysburg to prepare for college, and in 1867 entered Pennsylvania College at Gettysburg, Pennsylvania, from which he was graduated with honor in 1871, with the degree of A. B. (Bachelor of Arts), taking his A. M. (Master of Arts) degree in course in 1874. While at college he joined the Philomatheon Literary Society, which was certainly of value to him in after years, and fitted him for debating and public speaking. In those days it was more or less compulsory for college students to associate themselves with one of the literary societies. It is to be regretted that this is now optional, with the result that most students avoid this important feature of their education, and thereby lose one of the great opportunities of a college education; this is particularly true of students taking the full college classical course. I know whereof I speak, for I am myself president of the board of trustees of a Pennsylvania college. Allan was also a member of the Phi Kappa Psi fraternity.

When Allan Emory first went to Gettysburg to prepare for college in 1865, the Civil War had just closed, and the battlefield was strewn with relics of that decisive struggle. He was for some years much interested in these, and sent back home to his friends many bullets, buttons, bayonets, sabres and other relics which he picked up on the battlefield. He always claimed, and was proud of the fact that one of the professors (Professor Jacobs) pointed out to General Buford and other officers, from the tower of the Lutheran Seminary, the natural advantages of Gettysburg as a place to join issues with General Lee for this battle and for the disposition of the troops.

In 1872, Allan entered the Albany Law School of the Union University, Albany, New York, where he attended lectures for one year, and was graduated in June, 1873, with the degree of Bachelor of Laws (LL. B.). He then registered as a

law clerk in the office of B. F. Fackenthal, Sr., Esq., at Easton, Pennsylvania, where he remained but a short time, and then entered the law office of Lewis Stover, Esq., at Philadelphia. He was admitted to practice as an attorney-at-law in the Common Pleas Courts of the City and County of Philadelphia, on October 7, 1876. The practice of the law, however, did not appeal to him, nor was it fitted to his natural attainments, and he soon decided not to hang out his shingle as a practicing attorney on his own account.

Mr. Emory then associated himself with Mr. Joseph L. Cunningham, of New York, who had been a fellow student with him in the Albany Law School, and became interested in some western gold and silver mining operations, spending considerable time in Arizona, Colorado and California, not only as an associate of Mr. Cunningham, but also in prospecting on his own account, and also as a newspaper correspondent. After the death of Mr. Cunningham he succeeded him in representing United States Senator John P. Jones in some of his mining operations. For many years he lived in retirement, doing the things he loved to do, sketching and writing for which he had a special aptitude. He also spent part of his time in caring for some valuable farm lands in Iowa, belonging to his father's estate.

Mr. Emory was primarily a literary man and an artist, with natural ability for sketching, painting and modeling in clay, and I have often thought, and still think that he missed his calling in life and should have followed the bent of his natural abilities, and pursued his studies along literary and artistic lines, in which I fully believe he could have made himself eminently successful, rather than to have aspired to the wearing of a gown or a wig, or to sit on a woosack, or to engage in prospecting for minerals.

One of his classmates at Gettysburg College writes me as follows: "Al. Emory had great literary and artistic mental qualities, and it was to the regret of his friends that he did not guide his life-work along these lines, instead of law for which we all felt he was not naturally adapted."

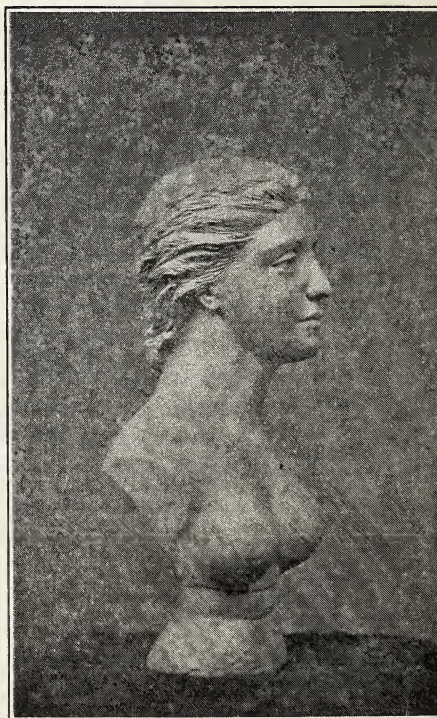
While a student at Gettysburg, he wrote many short stories and legends, some of which were published in the local newspapers. Among those which I have preserved is one entitled "Kaskeewawa, An Indian Legend of the Delaware," printed

June 30, 1871, in the *Bucks County Intelligencer*, which he located at his home town of Kintnersville and at the "Top Rock" of the Nockamixon Palisades. This legend, as well as his other stories and poems, show him to have had a versatile and imaginative mind, so essential in writing stories. During his college vacations he also wrote several plays, three of which he staged and presented in his home town and in some of the nearby villages. These performances always drew crowded houses. He used local talent, which he coached with the utmost patience. For all of these he made the stage settings and painted the curtains. One of these plays he called "Huahonka" and another "Swatara."

He also modeled in clay. This feature of his natural talent is worthy of special merit. Two busts modeled by him have been preserved, one called "Myrtis," made in 1870, the clay for which he got from Cemetery Hill at Gettysburg. The other



"MYRTIS" 1870



"LUCILE" 1873

called "Lucile," made in 1873 from clay obtained from Herstine's pottery located but a short distance from his Kintnersville home. His tools for this work were indeed crude, consisting of an old table knife and such other improvised tools. His family tells me that in due time they will take pleasure in presenting these two busts to our society. Etchings of both are shown herewith.

It was always a pleasure to go tramping with Al. Emory. The beauties of nature appealed to him, and he always saw the bright and sunny side of life. He often entertained us by sketching the views that presented themselves, for in his home neighborhood the Ringing Rocks, Top Rock, Kaufman's Hill, Palisades of Nockamixon and the Delaware River scenery presented unsurpassed beauty. Some of his sketches as well as some of his finished paintings have been preserved. In later years (September, 1889) he painted a jar of roses which he presented to Mrs. Fackenthal, which I will take pleasure in showing you. About the same time he wrote, especially for her, a story which he entitled "Dimpy."

After hearing an opera he could readily play many of the airs on his piano, and moreover he often composed music, for some of which he would also write the hymns or songs.

He not only wrote short stories, but he published several books, and had material ready for several other volumes. One of his published books entitled "Within White Walls," I will pass around for your inspection, with his latest photograph mounted in the front part thereof.

He was also a poet of no mean order and at the time of his death had material enough for a volume of poems, which he was planning to have published.

In politics Mr. Emory was a Republican, and in 1874, the year following his graduation at the Albany Law School, he was nominated in Bucks County for the Assembly, but at that time the county was controlled by the Democrats and he failed of election.

I do not think he belonged to any clubs other than his college fraternity, but he was deeply interested in Freemasonry. He was made a Mason immediately on coming of age. He was a Past Master of Orion Lodge, No. 56, F. & A. M., of Frenchtown, N. J.; a member of Howell Chapter, No. 199, R. A. M., of York, Pa.; a Knight Templar of St. Elmo Commandery, No. 14, of

Lambertville, N. J., and a Shriner, being a member of Crescent Temple, A. A. O. N. M. S., of Trenton, N. J. He was also a member of the consistory bodies of the Ancient and Accepted Scottish Rite of Freemasonry, and was honored by having the thirty-third degree conferred upon him.

Mr. Emory did not marry. He passed away at his Frenchtown home, November 12, 1925, in the seventy-eighth year of his age. His funeral was in charge of the Masons. His body was laid away in the family plot at Frenchtown, where his parents lie buried. He is survived by two sisters, Mrs. Emma V. Jones and Miss Clara Bell Emory, both of Brooklyn, New York, and one brother, William Edwin Emory, of Washington, D. C.

Mr. Emory was widely read, familiar with several languages, possessed of a retentive memory, and was a genial companion, a lovable, honorable and high-minded gentleman. I knew him perhaps more intimately than any one outside of his own family. I never heard him speak an unkind word of any one, and I always admired the lovely traits of his character.

The following poem, from his pen, was found by a member of his family, after his death, in the leaves of a book he was reading:

If I can leave a line
That will outlast the years,
Bring cheer to hearts that pine
And wipe away hot tears,
I'll be content
For I will know
One life below
Was not ill spent.

House Mottoes in Eastern Pennsylvania

By REV. JOHN BAER STOUDT, D. D., ALLENTOWN, PA.

(Doylestown Meeting, January 15, 1927)

SWITZERLAND—On the evening of July 19, 1924, in company with a group of Huguenot pilgrims, I found myself in the delightful Swiss city of Interlaken, just in time to see one of those gorgeous sunsets for which the place is noted. The snow capped Jungfrau, rising to a height of 13,670 feet, which marvelously reflected the golden rays of the setting sun. Our landlord declared, "This is a rare Alpine glow indeed." After a savory supper I set out to see the town. A few minutes brought me to a pension, where, above the first story, extending along the whole front of the building, was this legend:

WENN DU IM HERTZEN FRIEDEN
HAST WIRD DIR DIE HUETTE ZUM
PALAST.

WITH PEACE IN THY SOUL, THIS HUT
BECOMES A PALACE.

And above the second story in similar fashion:

DEM DER SEIN HAUS HAT WOHL
BESTELLT MACHT DOPPELT SCHOEN
DIE GANZEN WELT.

HE WHO PUTS HIS HOUSE IN ORDER
MAKES DOUBLY BEAUTIFUL THE
WHOLE WORLD.

A residence not far distant from the above presented this sentiment:

FREUND SIE ZUFRIEDEN MIT DEINEM
SCHICKSAL DEN TROTZ HASTEN UND
JAGEN BRINGST DU ES DOCH NICHT
WEITER BIS AUF HEUTE.

FRIEND BE CONTENT WITH YOUR
FATE, FOR IN SPITE OF YOUR HASTE
AND HURRY, YOU ARE ONLY AT TO-
DAY.

On the following day I took an early stroll, in order to discover if possible more of these interesting inscriptions. After leaving the hotel I soon came upon a house, where the motto was painted instead of being cut into the wood. The house was rebuilt in 1907, and the board with the legend of the old house was placed on the new house. The latter date was added:

1599 LASSET UNS AM ALTEN SO ES
GUT IS HALTEN 1907.

1599 LET US CLING TO THE OLD IF
IT IS GOOD 1907.

The gable end of a house near by presented a similar sentiment:

DAS ALTE SCHÄTZEN,
DAS NEUE LOBEN.

TREASURE THE OLD,
PRAISE THE NEW.

On the side of this same house was the legend:

ES WÜNSCH MIR EINER WASSERWILL
SO GAB IHM GOTT ZWEI MAL SO VIEL.

WHATEVER ONE MAY WISH FOR ME,
MAY GOD GIVE HIM A DOUBLE PORTION.

And on the other side of this house I found:

ZERST OB SIE BLICKE, WAS BOEST IS
FLUECKE.
BIM SCHAFTE RUECKE, DE MÜESS'S
DIR GLUECKE.

BEFORE YOU LIFT YOUR EYES TO
HEAVEN, AMEND YOUR WRONGS.
WORK FAITHFULLY, AND YOU WILL
SUCCEED.

In the wall of what was apparently an old barn I found a log on which was incised:

KUNST UN TREU HIER ANN NITO
GESPART DEN 10 TAG BRACHET 1647.

ART AND SKILL HAVE HERE NOT
BEEN STINTED 10 DAY JUNE 1647.

Not far from this old stable is the "Chalet Rugenau," at number 2 Rugenstrasse. This is perhaps the most mottoed of all the Swiss Chalets. The inscriptions continue clear along three sides of the house.

Chalet Rugenau, Emil Gauhl, Baufuhrer (Builder)

ICH HABE GEBAUT DISS HAUS ALL-
HIER ANN DIESE STRASSE.
DRUM MUSS ICH TADLER TADLEN,
UND HOESSLER HOSSEN LASSEN.
DOCH TRAUE ICH AUF GOTT.

I HAVE BUILT THIS HOUSE HERE AT
THE STREET.
THEREFORE I MUST LET FAULT-
FINDERS FIND FAULT AND LET
HATERS HATE.
NEVERTHELESS I TRUST IN GOD.

From the old house that had occupied the site there was retained a board for the new. It contains the legend:

HÜTE DAS HAUS, UND DIE DA GEHEN
EIN UND AUS.
ES WOHLT SEGEN DRIN, UNGLUECH
MUS WEIGEN.

GUARD THOU THIS HOUSE, AND
THEY THAT GO IN AND OUT.
THY BLESSING DWELLING THEREIN,
MISFORTUNE MUST DEPART.

Other inscriptions are:

WER AUF GOTT VERTRAUT, HAT
WOHL GEBAUT.

BRINGST FRIEDEN, KOMMST HEREIN.
UNFRIEDEN LASS DICH ASSEN SEIN.

WILLST DU EIN SCHOENES LEBEN
ZIMMEREN
SO MUST DICH NICHT UM ANDRES
BEKUEMMERN.

17 DAS WENIGSTE SOLL DICH VER-
DRIESSEN,
MUSS STETS DIE GEGENWART GE-
NIESEN 07.

DU SOLLST KEINEN MENSCHEN HAS-
SEN
DIE ZUKUNFT GOTT UBERLASSEN.

EIN JEDER BAUT NACH SEINEN SINN
KEINER KOMMT UND ZAHLT FÜR IHN.
ALEX. LENZ BAUMEISTER

HE WHO TRUSTS IN GOD HATH
BUILDED WELL.

IF YOU BRING PEACE, COME IN,
IF UNREST, THEN STAY OUT.

IF YOU WISH TO LIVE A BEAUTIFUL
LIFE
THEN YOU MUST NOT BE CONCERNED
WITH OTHER THINGS.

17 IF SMALL MATTERS ANNOY YOU,
THEN CONSTANTLY ENJOY THE PRE-
SENCE OF GOD 07.

HATE NO ONE AND LEAVE THE FU-
TURE TO GOD.

EACH ONE BUILDS ACCORDING TO
HIS IDEA,
AND NO ONE COMES AND PAYS FOR IT.
ALEX. LENZ MASTERBILDER

As I was about to turn away from this interesting domicile, the owner, Emil Gauhl, came out to greet me. He graciously invited me into the house. He was pleased to learn that I was from the United States, and was flattered by the interest I displayed in the inscriptions. He informed me that he had built the house and that several of the mottoes had been on the previous structure which had been erected in 1707. The other inscriptions were taken from houses in and about the city. I hurried back to the hotel proud of my find.

At Jenatz in the Grisons, there is a house distinguished by this sentiment:

IN NAMEN GOTTES WIL ICH BAUEN
MEIN ALL HIER AUF DIESEN PLATZ.
AUF JESUM STEHT MEIN VER-
TRAUEN; IM HIMMEL SUCH ICH
MEIN SCHATZ;

IN THE NAME OF GOD I WILL BUILD
HERE ON THIS SPOT.
IN JESUS I PUT MY TRUST; IN HEAV-
EN I SEEK MY TREASURE.

Throughout the German part of the Swiss confederacy and everywhere in Germany are found these delightful house mottoes,

which do so much credit to the moral and religious feelings of the people.

The Swiss and Palatinate settlers of Eastern Pennsylvania were familiar with date stones and house blessings in the homeland. They came to the woods of William Penn, not to trade with the Indians or to search for precious stones, but to make homes for themselves and their children and their children's children. When an immigrant prospered he soon erected a substantial stone dwelling alongside the original log-house. It is quite natural that he should desire to mark the attainment of this cherished hope with a date stone. Hence, it is that many of the old stone farm houses have a date stone somewhere in the walls. Frequently the initials of the builder were added, and occasionally the names of both man and wife appear. Occasionally a sentiment or a prayer was engraved upon the date stones.

HOUSE MOTTOES IN EASTERN PENNSYLVANIA—I will now invite your attention to the inscriptions and date stones to be seen on buildings in Montgomery, Lehigh, Berks, Lebanon and Lancaster Counties as far west as the Susquehanna River.

Our journey which I trust will prove interesting and entertaining, begins with a visit to a stately farm house in the valley of the Skippack in the County of Montgomery. It was built by Peter Wentz and his good wife, Rosina, more than a century and a half ago. A stone in the southeastern end of the house bears the date 1758. A stone tablet set in the wall where it may be seen by all who enter in. It reads:

P. W. R. W. JESUS KOM IN
MEINE HAUS WEI CHE NIMMER
MER HER AUS. KOM MIT DEINER
GUADEN GUD UN STELLE MEINE
SEEL ZU FREED.

P. W. R. W. JESUS COME INTO
MY HOUSE AND FROM IT NEVER MORE
DEPART. COME AND WITH THY
GRACE AND PEACE SET THOU MY
SOUL AT EASE.

General Washington occupied this house October 16 to 21, 1777. It was here that he received a despatch from Governor Clinton informing him of the surrender of General Burgoyne, and from it he issued orders for a thanksgiving service.

SATURDAY, OCTOBER 18, 1777

At Headquarters, Wentz's: ORDERLY BOOK.—"The General has his happiness completed relative to the successes of the Northern Army. On the 14th instant, General Burgoyne and his whole army surrendered them-

selves prisoners of war. Let every face brighten, and every heart expand with grateful joy and praise to the Supreme Disposer of all events, who has granded us this success. The chaplains of the army are to prepare short discourses, suited to the occasion, to deliver to their several corps and brigades at five o'clock this afternoon."

I am told that the house on the farm of the late Hiram C. Anders, about one mile east of the village of Fairview, has a date stone, the inscription of which is barely legible. It is the earliest of these quaint inscriptions, which portray, so eloquently, the feelings of the colonial period:

IHR HOELLEN GEISTER PACKT EUCH
IH HABT HEIR NICHTS ZU SCHAFFEN
DIES HAUS GEHOERT IN JESU REICH.
LASST ES NUR SICHER SCHLAFEN
1731.

BE GONE, YE HELLISH SPIRITS,
YE HAVE NAUGHT HERE TO DO.
THIS HOUSE BELONGS TO JESUS'
REALM
LET IT REST IN PEACE. 1731.

At "dead man's curve," near Fagleysville in Falconer Swamp, Dr. E. E. S. Johnson informs me, stands a house, the motto of which reminds us that all our possessions are but a loan.

DAS HAUS IST MEIN
UND DOCH NICHT MEIN
ES KOMMT EIN ANDERN
ES AUCH NICHT SEIN
ER BAUET VON JOHANNES
BRUNST UND WILIHELMEIN.

THIS HOUSE IS MEIN AND YET NOT
MEIN,
ANOTHER COMES (TO POSSESS IT)
AND WILL NOT BE HIS.
BUILT BY JOHANNES BRUNST AND
WILIHELMEIN

This inscription recalls the well-known motto on a house in Baumkirchen in Tyrol:

DIES HAUSE GEHORT NICHT MEIN,
DER NACH MIR KOMMT AUCH NICHT
SEIN;
MAN TRAG AUCH DEM DRITTEN
HINAUS;
ACH GOTT! WEIN GEHORT DIESES
HAUS?

THIS HOUSE DOES NOT BELONG TO
ME,
NEITHER TO HIM WHO COMES AFTER
ME;
THE THIRD ONE WAS ALSO BOURNE
OUT,
O GOD, TO WHOM BELONGS THIS
HOUSE?

LEHIGH COUNTY—One of the oldest buildings in Lehigh County is the Steckel or Troxel house. It is situated on the Coplay Creek not far from the village of Egypt. The house was built by Peter Troxel in 1756. He was born in Switzerland in 1718, and came to Pennsylvania with his father, John Troxel, in 1737. Upon the completion of the house until the erection of a

church in 1764 the Egypt Reformed congregation met in it for divine service. The date stone placed between two of the second story windows bears this inscription:

1756
GOTT, BEHUET DIS HAUS FUER ALLER
GEFAEHR, FUHR UNSER SEEL INS
HIMEL'S SAAL.

JOHAN PETER TRACHSEL
UND MARIA MAGDALENA.

1756
GOD, PROTECT THIS HOUSE FROM
ALL DANGER, AND LEAD OUR SOULS
INTO HEAVEN'S HALL.

JOHN PETER TRACHSEL
AND MARIA MAGDALENA.

In 1768 the farm passed into the possession of Peter Steckel, in which family it remained until recently.

One of the landmarks in Heidelberg township is the Handwerk homestead. The date stone of this house is eighteen inches long and twelve inches high. The inscription reads:

HOME BUILT BY
JOHANNES HANDWERK
1801
DANKET DEM HERN
DEN ER IST FREUNDLICH

The couplet is a part of the first verse of Psalm 107, "Oh give thanks unto the Lord for He is good."

BERKS COUNTY—My cousin, the late George W. Geist, of Frankfort, Philadelphia, related to me, shortly before his death, how, in going from Sally Ann Furnace to Lyons Station, he found this legend on a house:

DER EINER MACHTS
DER ANDERE VERACHTS
DER NACHTS SAGT WAS MACHTS.

THE FIRST ONE BUILDS,
THE SECOND DISAPPROVES,
THE NEXT SAYS, WHAT'S THE USE.

I have repeatedly tried to find this building, but have failed. Possibly the house has been stuccoed since, and that this philosophical musing of the builder is covered. The same is perhaps true of other mottoes.

I have frequently visited the Oley Valley, Berks County, in search for historical and genealogical data. According to a notation, I visited the farm in Oley that was originally the homestead of Martin Shenkel, on August 31, 1917. I was in the company of the late Rev. Isaac Stahr. Here I came across a date stone sixteen inches high, thirty-six inches long, with the inscription:

MARTIN UND
MARIA
SCHENKEL
1766

MARTIN AND
MARIA
SHENKEL
1766

ALLE DIE
IN DIESEM HAUS
GEHEN AUS UND EIN
LASS DIR O GOTT
BEFOHLEN SEIN

TO ALL
THAT GO IN OR OUT
OF THIS HOUSE
BE THOU GRACIOUS,
O GOD

Few country homes are as ideally located as the Rothermel home at Merkel's Mill, Moslem Springs. It was erected by George Merkel in 1767. Up near the cornice in the front wall is embedded a red sandstone with the inscription:

GEORG MERCKLEN
UND
CHRISTINA 1767

ALLE DE IN DIESEM
HAUS GEHEN AUS
UND EIN LAS DIR
O GOTT, BEFOHLEN SEIN.

In the Willow Dale, near Blandon, on the Kauffman farm, lately owned by Franklin Seidel, may be seen a similar date stone. It is fifteen inches high and twenty-eight inches long. The inscription likewise gives the names of the owners, and invokes a similar blessing on all who go in and out.

ALLE DIE IN DIESEM
HAUS GEHEN AUS
UND EIN, LASS DIR,
O GOTT, BEFOHLEN
SEIGN

JOHANNES
KAUFFMAN
UND SUSANNA
KAUFFMAN
1771

Not only are these date stones similar in size in inscription and position in the walls, but the houses themselves are similar in size and general design. So that one cannot escape the conclusion but that these houses were erected by the same master mechanic. The years of their erection are accordingly 1766, 1767 and 1771.

On the walls of the living room in the Shoemaker mansion in the borough of Shoemakersville is painted the legend:

GOTT SEGNE DIESER HAUSE
UND ALLES WAS DA GEHT EIN UND
AUS,
GOTT ALLEIN DIE EH.

GOD BLESS THIS HOUSE,
AND ALL WHO GO IN AND OUT,
GOD ALONE THE GLORY.

A marble tablet in the gable end of the house is incised H. & C. S. 1768. These letters are the initials of Henry and Charles Shoemaker, who erected the dwelling. They were the sons of Jacob Shoemaker, Jr., of Germantown.

Cornelius Freed was one of the first settlers in Albany township. In his house the neighbors frequently gathered for safety and mutual protection during the several Indian uprisings. It is located in the cove known as "the Corner." He placed a stove-plate in the side of the building, which was removed lately and sold to a scrapman. Happily Dr. Thomas L. Montgomery, in his History of Berks County, published in 1886, gives us the inscription, by means of which the stove-plate may be identified. This plate has been designated by Doctor Mercer, as "The Traders." A similar plate is in the collection of the Bucks County Historical Society. It is the right side plate of a Pennsylvania jam stove, with the picture of a shipping port, probably that of Philadelphia, in the center. Above and below this representation are four lines of a rhymed inscription, attacking false religion and the blindness of a world of greed.

WAS NICHT ZU GOTTES EHR
AUS GLAUBEN GEHT IST SUENDE
MERK AUF DU FALSCHES HERTZ
VERLIEHRT IHR KEINE STUNDE

THAT IS SIN WHICH IS NOT TO THE
GLORY OF GOD, IN FAITH.
BEWARE THEN FALSE HEART, WASTE
NOT A SINGLE HOUR.

DIE UEBERKLUGE WELT VER
STEHET, DOCH KEINE WARREN
SIE SUCHT UND FINDET KOTH
UND LAEST DIE PERLEN FAHREN.

THE OVERWISE WORLD FAILS TO
RECOGNIZE TRUE WARES;
IT SEEKS AND FINDS TRASH AND
LOSES THE PEARLS.

In the walls of Hain's church near Wernersville has been retained the date stone of the former building. The inscription reads:

DAS IS EINE HOCH DEUTSCH RE-
FORMIRTE KIRCH. WELCHE IST
AUFGEBAUT WORDEN IM JOHR ANNO
CH 1766.
ALLE DIE DA GEHEN AUS UND EIN
SOLLTEN GOTT UND DEM (KONIG
GE) HORSAM SEIN.

THIS IS A HIGH GERMAN REFORMED
CHURCH. IT WAS ERRECTED IN THE
YEAR OF CHRIST, 1766.
ALL THOSE THAT GO IN AND OUT
SHALL BE OBEDIENT TO GOD AND
THE (KING).

There is a tradition that has been handed from generation to generation concerning the obliteration of the word Koenig and

the letters g-e of the word "gehorsam." It is said that one Sunday morning the men of the congregation were gathering underneath the trees in front of the church, as was their custom, that Elder Ruth chanced to look up at the inscription of the date stone over the doorway and remarked, "Der verdommet Koenig mus raus." So before the service was begun, he secured a ladder, a hammer and a chisel at the schoolteacher's house nearby and removed the Koenig from the lettering of the stone. In so doing, however, the letters "ge" of the word "gehorsam" were also cut out. In this fashion was King George III excommunicated by the elders of Hain's church.

LEBANON COUNTY—Leaving Berks County and entering Lebanon County at the eastern border, we find quite a few houses with date stones. The first that is of special note is the old Zeller fort, situated midway between Sheridan and Newmans-town. Above the lintel of the door is carved in a red sandstone what appears to be a coat of arms, and the name:

HEINRICH ZELLER

1745

At Mill Creek Center, still stands the old Jeremiah Miller house, with its massive limestone walls, three stories high, with a broken or Dutch roof. It has a fine stairway and elegant mantel-piece. High up in the wall is this date stone:

JERE MUELER

17

52

MARIA, CATH. M.

His son erected a grist mill, a Kume-Muhl, hard by the house, 32 years later. The date stone reads:

17

84

17

84

GOTT, ALLEIN DEEN

SERVE GOD ALONE

MICHAEL MILLER

MICHAEL MILLER

M. ELISABET MILLER

M. ELISABET MILLER

Two miles south of Myerstown on a plantation, still in possession of descendants, is to be seen the old Spangler house, with its quaintly carved date stone, with the inscription:

GOTT GESEGNE DEISE HAUS,
 UN WER DA GOTT EIN UND AUS
 ICH GE AUS ODER EIN
 SO STET DER DOTT UND WORTET
 MEIN: 17-82
 JACOB-SPENGLER, C. E. S. B. S.
 P. R. N.

As one approaches Myerstown from the east, where the highway crosses the Owl Creek, stands the Len residence, another splendid example of Revolutionary architecture. The date stone is inscribed:

GOTT, GESEGNE, DIE
 SES HAUS. WER DA GET
 EIN UND AUS 1777
 PETER LEN EFA LENIN

Several miles beyond Myerstown, near the source of the beautiful Tulpehocken, is the Captain Michael Leh house. It is one of the best examples of colonial homes, and has two date stones, with ornamental carvings. The one contains the familiar prayer:

GOTT GESEGNE	O MENSCH
DIESES HAUS UND	GEDE NCK
ALLEN UAS DA GOD	DER LETSTEN STUN
EIN OD 1769 ER AUS	EVA MAGDALE
MICHAEL LEH	17 NA LEI-IN 69

It was in this house that Captain Leh, in 1793, entertained his old commander, General George Washington, accompanied by David Rittenhouse, Robert Morris and Trench Francis.

The other legend may be rendered:

OH MAN, CONSIDER THY LAST HOUR.

Near the Center Square in Lebanon, in 1771, Caspar Schnebely erected a house, now the American Hotel. It has two date stones. However, instead of devoting one to himself and the other to his wife, we come here upon the name of the master mason to whom we perhaps owe most of the date stones invoking blessings in Lebanon County, and who probably planned these colonial homes, now so much admired.

MAURER IN LEBANON
 HEINRICH REWALT
 1771

GOTT SEGNE DISES
 HAUS UND ALLES UAS
 DA GEBT EIN UND AUS
 CASPAR - SAWINA
 SCHNEBELY A. D. 1771

Some distance west of Bismarck on the old Horseshoe Pike, one comes upon the Orth homestead. The date stone reads:

GOTT SEGNE DIESES HAUS &
ALLES WAS DA GET EIN & AUS. GOT
ALEIN DIE EHR & SUNST KEMEM
ANTERN MER.

ADAM & CATHERINE ORTS
1 * 7 (1 M Y) 6 * 2

GOD BLESS THIS HOUSE AND ALL
THAT GO IN AND OUT. TO GOD
ALONE TO GLORY, AND TO NONE
BESIDES.

ADAM AND CATHERINE ORTS
1 * 7 (1 M Y) 6 * 2

Leaving Lebanon, traveling westward, one soon comes to the home of the pioneer Luther pastor, John Casper Stover. Here his son, a Revolutionary soldier, built a house, and marked it with two date stones.

The one again contains the familiar lines of:

GOT BESSEGNE
DIESES HAUS UND
WER GEHET DA EIN
UND AUS.

JOHANNES STOEVER
AGNES STOEVERIN
1795

The second stone has this inscription:

FRIEDE SEI IN
DIESEN HAUS
UND MIT DEHNEN
WELCHE DRAUS
DIESES HAUS
ERBAUT IST
ANNO 1795

PEACE BE WITHIN THIS HOUSE, AND
WITH THEM THAT ARE WITHOUT.
THIS HOUSE WAS BUILT ANNO 1795.

Still proceeding westward one soon reaches Annville and turning north the new Steinmetz house presents itself. In the base of a porch pillar has been preserved the door-sill of the old Ulrich house, which was used by the neighbors as a place of refuge during the Indian uprisings. It contains this admonition:

SO OFT DIE THUER DEN ANKEL
WENDT, O MENSCH DEIN END BE-
DENK. 1751.

AS OFTEN AS THE DOOR SWINGS ON
THE HINGE, O MAN, CONSIDER THINE
END. 1751.

This legend recalls another one of those deeply religious sentiments found on the old house in the Rhineland from whence many of the early German settlers came:

WER EIN UND AUSGEHT ZU DER
THUR
DER SOLL BEDENKEN FUER UND
FUER
DAS UNSER HEILAND, JESUS CHRIST,
DIE EMSIGE THUR ZUM LEBEN IST.

HE WHO GOES IN AND OUT THIS DOOR
LET HIM CONSTANTLY HAVE IN MIND
THAT OUR SAVIOUR JESUS CHRIST
IS THE ONLY DOOR TO ETERNAL LIFE.

The date stones of the old Heilman house located about midway between the villages of Greble and Hamlin; which was destroyed by fire on Christmas some forty years ago, were placed in the wall of the new building. The one may be seen in the customary place in the front wall, and the other in one of the gables. Again on the front stones we read:

GOTT GESEGNE DIESES HAUS
UND WAS DA GET EIN UND AUS
GOT ALEIN DIE EHR
UND SOUSTEN KEINEN MER
1770 ANO

The second stone also contains a familiar legend with, however, a second couplet added:

WER GOT VERTRAUT HAT
WOHL GEBAUT
IM HIMMEL UND AUF ERDEN
WER SICH VERLEIT
AUF JUSUS CHRIST
DEM MUST DER HIMMEL WARDEN
JACOB (1770 ANNO D.) MARGREDA
HEILMAN

WHO TRUSTS IN GOD HAS BUILDED
WELL
IN HEAVEN AND ON EARTH,
TO HIM WHO RELIES ON JESUS
CHRIST,
HEAVEN BECOMES A SURE POSSESSION.
JACOB (1770 ANNO D.) MARGREDA
HEILMAN

LANCASTER COUNTY—In Lancaster County, due probably to Mennonite influence, one finds fewer of these prayerful legends on the date stones. There are, however, several that attract our attention. The first of these is the stately old house of the Bricker manorial estate. It contains on the south side in the customary place, a date stone with the inscription:

GOTT GESEGNE DIESES HAUS
UND ALES UAS DA GEGET EIN UND
AUS
GOTT GESEGNE ALES SAMPT
UND DA ZU DES GAUZE LANT
GOTT ALLEIN DIE EHR
SONST KEINEN MENSCHEN MEHR.
ANNO 1759 JOHRS
PETER BRICKER ELIZABETH
BRICK ERIN

GOD BLESS THIS HOUSE
AND ALL THAT GO IN AND OUT
GOD BLESS ALL THE PEOPLE
AND ALSO ALL THE LAND
TO GOD ALONE THE GLORY
AND TO NO ONE ELSE BESIDES
THE YEAR 1759
PETER BRICKER AND ELIZABETH
BRICKER

The next stone is that of the Oberholtzer Mill on the Little Conestago, one mile east of Petersburg:

WER GOTT VERTRAUT
HAT WOHL GEBAUT
IM HIMMEL UND AUF ERDEN
1792

WHO TRUSTS IN GOD
HAS BUILDED WELL
IN HEAVEN AND ON EARTH
1792

and immediately below, another stone:

JACOB OBERHOLTZER
CATHERINE OBERHOLTZER
1792

Hard by stands the old dwelling with the date stone:

CHRISTIAN OBERHOLZER
MAGDALENA OBERHOLZER
1769

In East Lampeter Township at Bridgeport, on the Philadelphia Turnpike, there stood until a little more than a quarter of a century ago, a house with the legend:

WE WILL BAUEN AN DIE STRASSEN
MUS LOSE MAULER PLAUDERU LAS-
SEN.

HE WHO BUILDS ALONG SIDE THE
HIGHWAY,
MUST LET LOOSE TONGUES WAG.

Let us cross over the Susquehanna River to look at what is one of the older houses in York County, at Stony Run. It was lately owned by Emanuel Landis. In the gable end is the date stone with the inscription:

17 ANO 37—HAB ICH
JOHANN SCHULTZ
UN CHRISTINA SEINE E-
FRAU, DIESES HAUS—
BAUT

ANNO 1737 HAVE I
JOHANN SCHULTZ
AND CHRISTINA, MY WIFE
BUILT THIS HOUSE

Recrossing the Susquehanna, on our return, let us pause for a moment and observe a beautiful inscription on the lock of the door on the west side of the First Reformed Church in Lancaster, "which speaks much of the simple piety of the times, when everything set apart for a sacred use was made to be a monitor of piety":

NUN GEHEN WIR ZUR KIRCHEN EIN,
UND UNSER HEILAND JESUS CHRIST
WOLLE BEI UNS SEIN.

JA, NICHT NUR HEIT ALLEIN, UND
SO LANGE WIR AUF ERDEN SEIN,
SONDERN SO LANG DAS UNSERE
SEELE LEBET.

JESUS GOTTES SOHN HAT DIE EHREN
KROU.

ER WOLLE DOCK UNS AUCH HELFEN,
IN DEN HIMMEL'S THROU.

ICH BIN GEKOMMEN DIE SUNDER
ZU BUSSE ZU RUFEN, UND NICHT
DIE FROMMEN. MATH. IX 13.
PETER KIEFFER 1756

LET US NOW GO INTO THE CHURCH
AND MAY OUR SAVIOUR, JESUS
CHRIST BE WITH US.

YES, NOT ONLY TODAY, AND AS LONG
AS WE ARE ON EARTH, BUT AS LONG
AS OUR SOULS SHALL LIVE.

JESUS, THE SON OF GOD, HAS THE
CROWN OF GLORY.

MAY IT BE HIS WILL TO GUIDE US
INTO HEAVEN.

I AM COME TO CALL SINNERS TO
REPENTANCE AND NOT THE RIGHT-
EOUS.—MATT. IX, 13.

PETER KIEFFER, 1756

In vain does one look for date stones with inscriptions among the homes of the early Quaker or English settlers, with perhaps the single exception of the modest home of the celebrated botanist, John Bartram. He placed in the gable end of his house a date stone with his name and that of his wife:

JOHN AND ANNA BARTRAM
1731

and on a tablet, placed above his study window on the east side of the house, 39 years later, he expressed his creed:

'TIS GOD ALONE, ALMIGHTY LORD,
THE HOLY ONE BY ME ADORED.
JOHN BARTRAM, 1770

Francis Daniel Pastorius had, over the door of his cave dwelling, the legend:

PARVO DOMUS, SED AMICA
BONIS PROCUL ESTE PROFANIL.

A MODEST HOME, BUT PLEASING TO
THE GOOD, LET EVIL MEN KEEP
AWAY.

William Penn is said to have smiled as he paused to read it, on one of his visits to him.

And now our journey ends. I trust that you will agree with me, that in this excursion into Pennsylvania Germandom, we have come just a little closer to the thoughts and feelings of the early German and Swiss settlers.

The Last Days of Harness Making in Bucks County

By REV. DAVID GEHMAN, FOUNTAINVILLE, PA.

(Doylestown Meeting, January 15, 1927)

HARNESS MAKING in early years, as far back as 1850, was a good paying business. I began making harness in the year 1864, working for James Frederick, in Douglas Township, Montgomery County, Pa., but I never served as an apprentice. I followed the trade on my own account at intervals, while farming in Doylestown Township until 1900, I then opened shops in Doylestown and Fountainville, which were maintained until 1924, when they were closed; this was due to the innovation of automobiles, which almost completely crowded out driving horses, making light harness no longer necessary. This also ended the sale of plumes, whips, hearts, fancy spreads, fancy rings, and everything else used merely for show in decorating the horses. For the same reason whip factories were forced to close. Whips were made from all kinds of leather, such as raw hide, seal skin, and whale bone, whale bone being the best sellers. The harness business required good care, judgment and honesty, to build up a good trade, as quality and safety were of the greatest importance. It required great care in selecting material of all kinds. The leather used was of many kinds, from the hides of steers, calves, pigs and sheep. Sheep skin leather was used for pads, such as required for collars, breeching, linings and where leather was apt to chafe the horses. Sheep leather, being soft and pliable, was also used for making little pads to be stuffed with cotton, pump pads, nose pads, saddle pads and other such like purposes. Pig's leather was used for collars, on account of its durability. Raw hide was used for plaited traces also for hame-straps, belt-lacers and for other parts where strength was required. The main kind of leather used for harness was cow or steer hide; this could be bought from wholesale houses all over the United States, and was sold mostly by traveling agents. Rawhide is made out of untanned cow or steer hides.

HARDWARE—Some of the rougher hardware was made in blacksmith shops, but the finer and fancy polished goods were

bought of dealers, lines of which were carried in country stores and hardware shops. The hardware or trimmings consisted of rings, buckles, rivets, small bolts, turrets, etc. These trimmings were made of brass, rubber, metal, nickel, often silver or nickel plated.



STITCHING HORSE

TOOLS—Some tools were made by the blacksmith, but most of them were bought from factories, they consisted of: Shavers for splitting leather to make it of uniform thickness; round knife to cut along the scribe marks, and wherever a straight knife could not be used; draw knife used to cut long straps in different widths, used also as a gauge; splitting knife used to split off uneven parts of straps; cutting knife used to cut out slanted and tapered parts where no other cutting knife could be used; stitching horses; square mandrils to shape up leather slide loops and keepers; collar stuffer to stuff horse collars with curled hair; creasers to put beads along the edges; other tools were: awls, hammers, chisels, files, punches of various kinds, punch-blocks, straight and crooked needles, scribing compasses, stitching wheels, pad-stuffers, saddle-horse, vises, pincers and various other small tools, necessary to make light and heavy harness.

HARNESS—A full line of harness consists of heavy harness, light harness, halters, bridles, saddles, flynets, and for other uses and parts wherever leather is required. For sewing harness waxed-thread is used, the wax is made of bees-wax, tar and rosin. Heavy harness consists of collar, hames, hame-straps, traces, hip-straps, choke-straps, belly-bands, back-band, turnback, crupper and a bridle. There are different kinds of traces such as: folded-leather, stitched, platted, rope, rawhide and chain. Opinion varies as to which is the best; platted rawhide was often preferred, but the best for service is a folded leather trace fastened to a pair of old-fashioned root hames. Bridles are made up of bits, head-piece, front-piece, throat-latch, side-cheeks, blinds, bit-straps, choke-strap, reins and lines. Bits are of different

kinds, often made to fit the horse's mouth. Some are or were made by the blacksmith. Bits are known as curb, straight, jointed, twisted, double-twisted, and a jaw breaker, which is a very severe bit, and used only for unruly horses. Check-reins are also part of the bridle. Light harness takes practically the same parts as heavy harness, with the addition of martingales, quilers, and a saddle in place of a back-band. A saddle is mounted with hook, rings, breakers, and shaft tugs. Some prefer a breast strap instead of a collar and hames, and some prefer to omit the blinds. Halters are used to tie the animals fast to their stalls and to lead them out to pasture or to water. Flynets, used only during fly season, are made up with long strips of leather, punched about one inch apart, with what we called "lashes," laced through them. Cheaper flynets are also made out of cord; cord net making was profitable in the year 1900. They are still being made.

It is interesting to know how the business of a country harness-maker was carried on. Customers would place orders during the winter, which kept the harness-maker busy until spring. When spring time came he would go to the farms of his customers, taking his tools with him and repair and grease their harness ready for their spring work. Neatsfoot, an animal oil, is the best for oiling harness. The harness-maker would go from farm to farm, until all were in shape for their spring work. This done the harness-makers would return to their shops, until harvest time, when they would close their shops, go out in the fields and help to gather the harvest; when this was done they would again return to their shops and apply themselves to their trade again.

Notes at Random from My Life's Experience

BY MATTHIAS H. HALL, PRINCETON, N. J.*

(Doylestown Meeting, January 15, 1927)

IN 1850, there were many log houses and log barns. A few had thatched or straw roofs. Some fields were uncultivated, weeds and briars growing on them. There were many draw-wells, water being drawn up by means of a windlass, and on some farms well-sweeps were used.

Many farmers had long rows of cherry trees along the lanes or public roads. There were cherries to sell, cherries to keep, cherries for the birds, and cherries for the boys.

White-covered wagons were used to go to church, funerals, and other places. Some of them were without springs.

Buckwheat cakes were baked on the top of tenplate stoves or on a bake-iron in the fireplace.

Farmers shelled much of their corn on a spade by placing the sharp end of a spade over a half-bushel measure or a sawed off barrel, then sitting astride the handle and pulling the ear of corn over the sharp spade.

If much was to be shelled at a time, they would spread it on the barn floor and tramp it off with horses or thresh it off with a flail. Some of the corn grown in Bucks County was kiln-dried and shipped to Europe.¹ There was a kiln for drying corn at Spring Valley or what is now Mechanics Valley. There were two near New Hope and probably there were others.

About 1854 or '55, a wave of prosperity came over the country. Fields that had been lying idle were cultivated, more improved tools and machinery were used, there were nicer wagons and sleighs to ride in, and finer clothes were worn. There were fewer barefoot boys and girls. Rooms were papered instead of whitewashed and people commenced to have musical instruments in their homes. The Rev. Samuel Nightingale, about 1856, had the first or second piano in Doylestown.

* Mr. Hall was in the eighty-fourth year of his age when he wrote this paper. He was born April 27, 1844, and is now (1932) in his eighty-eighth year. He is serving on the board of managers of the Bucks County Historical Society.

¹ Grain drying kilns were invented and patented by Henry Quinn, March 10, 1849. See Vol. III of these papers, page 525.

About that time, people had better stoves for cooking and baking. About 1855, people commenced canning fruit and vegetables, but it did not become common until about 1860. Drying of fruit and making preserves and applebutter have declined and are not carried on to their former great extent.

Harpoon hay-forks with rope and pulleys were used for unloading hay with horses. Horse rakes on wheels and grain drills were not common until 1860. Sewing machines and screens for doors and windows became common about 1870.

Between 1855 and 1858, large droves of sheep passed through Bucks County each from one to five thousand in number.

Up to 1870, farmers grew their own clover and timothy grass seed. The seeds of many noxious weeds were brought in between 1870 and 1890; among these were the yellow-top daisy, wild radish, wild mustard, wild lettuce, dodder, chickory, a species of thistle and others.

A very noxious weed, known as horse-nettle in Bucks County and Sodom-apple in Chester County, spread from Humphrey Marshall's botanical garden in Marshalton, Chester County, before 1855; from there it has spread across to Bucks and in more distant places; probably ere long, it will be on every farm in Bucks County.

A plant by the name of gallinsoga, the seed of which was brought from South America about 1905, is bushy and has a small flower, is now found in many gardens.

Alsike clover was first grown on farms in Bucks County, between 1895 and 1900 and alfalfa about ten years later.

Different ways that were practiced in planting corn are as follows: One of the early ways was to plow the whole field in ridges, four furrows to a ridge, planting corn in rows on the ridges.

Still another way was to plow the ground, harrow it, then plow two furrows to a ridge four feet apart; then mark the other way with furrows four feet apart and plant at the intersection of the ridges. Ridging was abandoned about 1860. To plant a field of eight or ten acres with corn in a day, they would have the ground all ready and marked one way, then two men with plows, one horse to a plow, would mark the rows the other way. One marking rows eight feet apart running to poles. One pole at each end and one in the middle of the row with white or red

rag on each pole to make them conspicuous. The other man marking rows without poles.

Three boys or girls were needed to drop the corn, and three larger boys or men to drop the compost, consisting of short, dry manure prepared for the job, dropping a small handful on each hill. Then three men would cover with hoes. About 1875, sleds were drawn by horses (a man riding), marking two rows at a time. They also used coverers drawn by horses about that time. About 1890, corn planters were used. By 1910, about all the corn was planted with planters.

Next, our wild birds and animals. The groundhog made their first appearance about 1890 in central and lower Bucks County, and made many dens suitable for foxes. This may be why foxes have become more numerous than formerly.

Hollow trees have become so very scarce that racoons and gray squirrels, flying squirrels, also owls, flickers and other birds that build in hollow trees have become very scarce. The barn swallow is the only one of our native birds that is as numerous today as it was seventy years ago. Seventy-five years ago it was a common sight in the twilight of the evening of the summer time to see a flock of one hundred or more night hawks dipping and diving over a field after insects that flew only at night. There were enough cuckoos to keep the caterpillar from being very destructive. Cliff or jug swallows were quite common until about 1860. They built nests of mud under the eaves of barns, leaving in each a small round hole to go in and out.

Our mowing machines and other heavy machinery have been very destructive to land-turtles that formerly were very numerous. On a farm near Pineville, Bucks County, upon which I lived, a land-turtle with the initials (H. S.) of Jonathan Heston, date 1795, was frequently seen up to 1870. This date was known to be correct by the family that had lived on the farm during that time. About 1900, while plowing for oats in April, I plowed a turtle under, not knowing it at the time. In plowing for wheat in August, I uncovered it. It was on its back fast. I knew it had been there all that time from the efforts it had made to turn itself. I loosened it and it walked off, it having missed one crop of strawberries.

I have seen the seventeen year locusts come five times and they have been fewer in numbers each time. On two of these

occasions some patriotic fellows stayed a few days longer than the rest and uttered their last notes on the Fourth of July. Texas flies made their first appearance about 1890. The Colorado potato beetle came in 1874 in small numbers.

The chestnut tree blight reached Bucks County about 1907, and has killed about all the large growth of chestnut timber. If it has run its course, it will take hundreds of years for the few little sprouts and bushes that are left to reforest our land with chestnut timber as good as it was when the blight came. It may be well to state that chestnut timber grew better on light soil than on heavy soil. One of the best chestnut timber districts in Bucks County was the sandy ridge from Doylestown to the Delaware River. The outlines are as follows: commencing one mile west of Doylestown, from there to Furlong, thence along the north side of the limestone valley to the river, thence to Lumberville, thence west along the valley to a mile north of Doylestown, thence to the place of beginning.

There was a good bit of chestnut timber on the Buckingham Mountain and on the Jericho Hill, also west from Neshaminy Falls and Bridgeton into Montgomery County. There were some chestnut timber districts in the upper part of Bucks County. But I am not able to outline them. The oftener chestnut timber was cut off, the thicker it grew the next time, many sprouts coming up from every stump. It being a rapid grower from the stump, sometimes it crowded out other timber. In about thirty-five or forty years it grew large enough for telegraph or telephone poles and fencing timber. In clearing of timber land some chestnut trees were left that grew very large—ranging in size from two to eight feet in diameter and bore many chestnuts. I learned from experience that in whipping the burrs off just before they were ripe the tree would die the next year. From 1850 to 1860 chestnuts sold in Doylestown from six to ten cents a quart, in 1875 at fifteen cents a quart.

On a farm that I owned in Upper Makefield there were two chestnut trees near the Wrightstown Township line and near the public road. One was six feet and the other seven feet in diameter. These trees had many hollow limbs that made a good home for hoot-owls and opossums. One night as I was passing one of these trees, I saw a small kitten at the butt of the tree. Evidently a mother cat had kittens in one of those hollow limbs,

the kitten having ventured out the rotten bark broke loose and let it fall down. I have since thought it might have been a wild cat. That was about 1890.

Wire superseded timber for fencing about 1880; up to 1880 when a new barn was built, twenty to forty men, from the surrounding neighborhood, were invited to help the carpenters raise the timbers.

Among the changes that have taken place in the last 25 or 30 years, the blacksmith and wheelwright shops have taken an important part. Up to 1900, almost every village had a blacksmith shop. There were also some in the rural districts. By 1920, nearly all the wheelwright shops had been closed and about four-fifths of the blacksmith shops. Some of these blacksmith shops had been in operation one hundred years or more. There were five in Wrightstown Township and now but one remains. There were seven in Upper Makefield Township, now only two remain. There were fourteen in Solebury Township and fourteen in Buckingham, seven in Plumstead, four in Doylestown Township. Now there are none left in Doylestown Township.

About 1870, our gristmills and water-powers commenced to go into a decline and by 1920 four-fifths of them had closed. Some of them had been in operation 150 years.

Oil works for making oil from flaxseed were taken out of the Mechanics Valley mills in 1860. Oil was made from hickory nuts in 1860 at Bridge Point mills from nuts gathered from the woods. These mills were originally intended to make oil from flaxseed.

In 1860, on a portion of the north end of Bowman's Hill, there was a dense growth of spruce and also at Dark Hollow and Spruce Hill on the Neshaminy.

The darkest days in the history of agriculture since 1850 is the present. Up to 1875, farmers could get the very best of help. In wages, they could compete with any other industry. Since about 1875, it has been gradually getting harder to get good help. Today there are but few farmers that have good help and a great many have no help at all. Consequently, there are thousands of idle and uncultivated acres in Bucks County that had been cultivated for two hundred years. Homesteads now lie idle where six or seven generations of the same families had formerly lived and prospered. The farm depression that

has taken place in Bucks County and other places is just as much a part of our history as is the success or defeat of our armies.

In four townships, Upper Makefield, Buckingham, Solebury and Plumstead, it has been estimated that there are six thousand acres now uncultivated that formerly were under the plow.

When Philadelphia had three hundred thousand or more in population and it took nearly a day to take a load of marketing there, the farmers of Bucks County were prosperous. Today Philadelphia has two million of people and the farmers can reach it in two hours by automobile with a load of marketing and yet these thousands of acres remain uncultivated. What has caused this depression in farm industry? Shall I give my opinion as to some of the causes?

For more than a hundred years we have grown a surplus of farm products. This surplus is sold in the world's markets, in competition with those products grown by cheaper labor. This surplus fixed the price of the whole crop, while ours is grown by higher priced labor. One reason why the depression has been increasing is the higher price of labor. In different parts of the world, there are very fertile agricultural countries that are being developed and their products are grown by cheaper labor and on cheaper land than ours and are competing in the world's markets with ours.

Consequently, the value of farmer's labor has been reduced to the level of the wages in those countries. Our farm values are being reduced to conform with the cheap lands of Argentina, Australia, Canada and other countries because we have to sell in the same markets at the same price.

What is the remedy? A bounty on exports to be adjusted to suit conditions which the farmers are not likely to get because it would increase the price of farm products and the cost of living and the consumer would vote it down.

While we have a surplus without an export bounty more idle acres, more empty barns may be expected and the worst is yet to come.

Our merchant marine is laboring under the same disadvantages as the farmer and if the government does not give some relief, our merchant marine will go into a decline just as some of the farms of Bucks County have done.

River Boulders or Cobblestones Used for Paving

By JAMES H. FITZGERALD, MECHANICS VALLEY, PA.

(Doylestown Meeting, January 15, 1927)

THIS paper relates to a former industry of Bucks County, now almost forgotten, namely: the gathering and shipping of cobblestones to be used in paving streets. My personal recollection covers a period of ten years, from 1875 to 1885. A large number of men and boys found profitable employment in taking these rounded stones from the bed of the Delaware River, and from certain fields in the valley of the Delaware, all of which were washed down the valley from the great northern ice glacier. As Philadelphia was the principal market, our inquiry in reference to paving streets is confined to that city. Cobblestones used in Trenton were taken directly from the river to the capital of New Jersey. Very little use was made of them in Bucks County towns except to pave stable-yards and gutters. I noticed that a gutter, to carry off water on the Foulke property in New Hope, was paved with them.

In 1750, a Grand Jury of the County of Philadelphia reported to the Court "the great need of watchmen and paved streets. Of the former they would repress nightly insults; and of the latter, frequent complaints were made by strangers and others of the extreme dirtiness of the streets for want of paving." Benjamin Franklin in his Memoirs says that he was "active in advocacy of paving, lighting and cleaning of the streets."

From Watson's Annals we learn that very little effort was made to pave the streets before the year 1761. The first endeavors were limited to means obtained from lotteries. Second Street from High (now Market) to Race Street was paved in that year. In 1762 an act was passed "regulating the pitching, paving and cleansing the highways, streets, lanes and alleys within the settled part of Philadelphia." The first curbstones were set in Water Street from Market to Arch about 1786-8. A change was also made in the manner of paving. Several streets where the passage of water was great had the channels or gutters in the middle.

Before proceeding to pave a street with cobblestones it was

graded and given a coat of gravel or ashes to a depth of several inches. The paver placed the cobblestones on end, using a tool with a short handle resembling a pick with a poll. When necessary some of the gravel was picked from the bed in placing the larger stone so that the surface would be even. The paver gave the stone a sharp rap with the poll end of the tool. A generous quantity of gravel or sand was spread and raked over this surface in order to fill the interstices. The cobblestones were then rammed tight into place. The tool used was of oak or hickory about four and a half feet in height and from four to six inches in diameter with an iron band near the bottom. There were two handles. One was inserted at a point near the center at right angle; the other was on the top and vertical. The standard weight of this tool was fifty-five pounds.

I have no evidence to show that cobblestones were shipped from points in Bucks County prior to the construction of the Delaware Division Canal from Bristol to Easton. From Davis' "History of Bucks County" we learn that ground was broken for the canal at Bristol, October 28, 1827. The basin at Bristol was finished in 1830 and the canal formally opened from Bristol to New Hope, December 7, 1830. In 1854, the outlet lock at New Hope was built. Through this lock canal boats were lowered into the Delaware River and fastened to a cable and taken across to the New Jersey side where they were raised by another lock into the feeder of the Raritan Canal. Mention has been made of this canal because its operation gave a great impetus to trade in New Hope and to the shipment of cobblestones from points in Bucks County. During the summer months when the river was low, and the water warm, flat boats from twelve to eighteen feet in length were anchored in shoal water. The pickers stood on the river bottom and used a long-handled fork, made for the purpose, tossed the cobbles into the boat. A grapple was sometimes used, especially when the stones were heavy. When the boat was laden it was propelled with the use of poles to the shore and unloaded. "Boothers," meaning boulders, was a local name given to these cobblestones. On bills-of-lading, however, they were called "pavers." Stacy B. Brown, of Newtown, and my associate Jury Commissioner, informs me that his grandfather, Stacy Brown, of Brownsburg, born 1796 and died 1879, was engaged in the industry; and that a

drag or "boother rake" with twelve teeth or prongs was used to drag the cobblestones from deep to shallow water. This drag was purchased in Wilkes-Barre, Pa. From the banks of the river the cobblestones were hauled to the canal bank on carts and wagons where they were loaded on canal boats. At Upper Black Eddy, Pa., John Haney and others used mules while John Scheetz, Sr., and Michael Sigafoos of the same place, drove yokes of oxen. Stacy Brown, of Brownsburg, also used oxen in hauling.

Pickers, when not paid by the day for their labor, sold the stone in boat-loads to a shipper, who, in turn, sold them to a dealer or contractor in Philadelphia. The toll paid by the shipper of a cargo to the canal company was one mill for one thousand pounds per mile with an additional toll of two cents per mile for the boat. Thomas N. Ryan, who for a number of years was Collector of Tolls at New Hope, informs me that for the convenience of pickers and to avoid the expense of hauling, canal boats were lowered into the river at New Hope and fastened to a "ring rock." After being loaded with cobblestones the canal boat was raised into the canal. These ring rocks were located at points in the Delaware River where, owing to shallow water and swift currents, the Durham boats could not be propelled upstream by the use of oars or poles. A rope was fastened to the ring and the boat was pulled by using the capstan. Buoys marked their location.

Cobblestones for paving were also picked from the land throughout the Delaware River valley. The owners of such land and their location were: John E. Holahan and William H. Gwinner, Bridgeton Township; Matthew Sheridan, Tinicum Township; John A. Beaumont, W. H. H. Thornton, Henry Wynkoop and Stacy Brown, of Brownsburg.

Shipments of cobblestones were made from nearly all points on the Delaware Division Canal from Easton to Yardley. For the names of shippers and other data the writer is indebted to Peter B. Agnew, of Bristol; Bernard McDonnell and Thomas N. Ryan, of New Hope.

Raubsville was the home of Anderson Colvin, Philip Reese and the Steckle Brothers who made weekly trips with eight boats to Philadelphia. In addition to loading their boats in the five mile level below Easton, their boats were sometimes lowered

into the Delaware River through an outlet lock in the dam of the Lehigh River at Easton and were loaded with cobblestones brought from points above that city. William Warner of Riegelsville shipped three boats weekly. John Hoffman of the same place was also a shipper. Aaron F. Harwick of Upper Black Eddy owned five boats, making weekly trips. The names of the Harwick boats were: Past Grand, Dundee, Pawnee, Weehawken and Two Brothers. George Sigafoos of Lodi (near Upper Black Eddy) kept two boats going for some time. Joseph Samsel of Erwinna was the owner of the boat "Colonel W. W. H. Davis," and Elias Samsel of the same place the boat "Clipper." Moses Bird of Point Pleasant was also a shipper with his boat called "Colonel Ellsworth." The captains of the boats were, as follows: Abraham Deihl, Nelis Baylor, Samuel Fretz and Calvin Strong for Aaron Harwick; Wilson Tettermer and Hiram Laubenstone for Joseph Samsel; John Louder and Josiah Carty for Elias Samsel. The Lawless Brothers of New Hope: Jeremiah, Thomas and John, each owned a boat and were shippers and captains. Another brother, Peter Lawless, was engaged in the work occasionally. The Lawless Brothers also loaded at Borden's Lock near Yardley. Bernard McDonnell, ex-Recorder of Deeds of Bucks County, informs me that he was a captain of a canal boat and piloted a great number of cargoes to Philadelphia. He brought two loads from Parryville on the Lehigh River. These cobblestones, however, were inferior in quality as they were easily broken, and we do not find any further shipments were made from that point. The wharves to which consignments were made were: Mead Alley, Shackamaxon, Christian and Reed Streets. Among the contractors to whom consignments were made was John M. Mack, the founder of the present firm of The Mack Paving Company, Philadelphia.

Favored with a letter of introduction from our society, I had the pleasure of meeting C. E. Myers, Deputy Chief of Highways, Department of Public Works, Philadelphia. The information which Mr. Myers obtained for me is of such great value that I will conclude this paper with his researches. I will now introduce Mr. Myers, who says:

"I find from our records that we have available the titles only of ordinances from 1701 to 1850. From 1850 to date we have complete copies of ordinances. Beginning somewhere

around 1750 I find ordinances from then on up to about 1850 appropriating money to the Committee of Public Highways for street improvements and repairs but not specifying the streets by name. From this I would assume that whatever work was done was by labor hired directly by this Committee and not by contract and that the work such as it was—probably of very crude nature—consisted of very little actual paving, but rather a scheme of keeping in condition existing dirt roads. During this same period, however, a number of sewers were placed and grades were established on various streets throughout what is now the central part of the city and on each of these the street was specified.

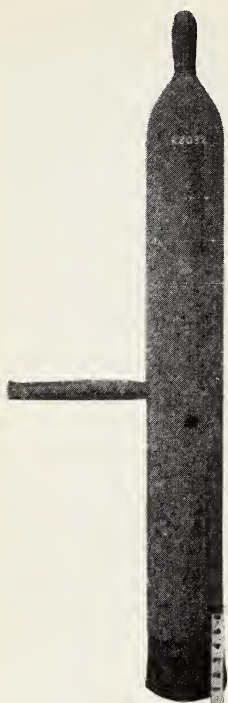
“Some time prior to 1850, pebbles, or what we now call cobblestones, had been used to some extent in the city. The first record I find of a change from these pebbles to dressed stone (granite blocks) is one of March 14, 1850, and again April 8, 1852, when ordinances were passed authorizing the repair of the existing pebble pavement on Delaware Avenue. (See Act of Legislature of May 25, 1829, relating to paving the streets of Philadelphia.) A later ordinance for the same purpose was passed March 16, 1854, but was repealed by an ordinance of April 27, 1854. The repealing ordinance states that ‘the funds appropriated are for the purpose of paving part of Delaware Avenue with cubical blocks and repealing the ordinances authorizing the repair to the pebble pavement.’ This leads me to believe that this is the beginning of the use of a hand-cut block.

“I find an earlier record authorizing the improvement of High Street (now Market), dated April 21, 1808, with a supplement of October 6th of the same year, but it does not state anything about the character of the improvement. It undoubtedly was done with pebbles with the gutter in the middle of the street.

“The first thing in the way of new facts is the ordinance approved June 12, 1868, which states briefly that ‘from that date on all the section of the city lying between the Delaware and the Schuylkill Rivers, and from Tasker Street to Girard Avenue that may at any time in the future require paving or repaving cubical blocks must be laid. These blocks must be of approved materials and have a depth of five inches, to be four to six inches long and from two and one-half to three inches

wide, placed upon a bed of anthracite coal ashes, gravel and sand with a depth from top of finished stone surface to natural ground of twenty inches.' It further states that, 'streets in Germantown, Frankford, Manayunk and West Philadelphia must be laid of rubble pavement which shall be stone irregular in shape, having a depth of from six to nine inches, a length of from five to twelve inches, with a flat top surface and a width at its widest part not to exceed four inches, placed on a layer of gravel and ashes.' The same ordinance further directs that as any old cobble streets are repaved or replaced the Chief Commissioner of Highways shall sell the cobblestones to the highest bidder. It further provides that in the extending of paving above or beyond limits as defined above cobblestones may be used unless a future ordinance provides otherwise. These cobblestones must be placed upon the same sub-layers of gravel and ashes as specified for rubble paving, no stone, however, to exceed nine inches nor be less than six inches in depth and they are to be set close, breaking joints and to have their greatest length upright and vertical as to position and to be rammed until no further impression can be made upon them with a fifty-five pound rammer. Relative to prices—the ordinance states that the cubical block paving shall not exceed in cost three dollars per square yard, the rubble one dollar and a half per square yard and the cobble paving one dollar and twenty-five cents per square yard. I think that any cobble paving laid after this date was done by City forces and not by contract. While I have not found any ordinances authorizing cobble paving after this date, yet there must have been some done. Peter J. Leone, President of the Municipal Paving Company, Philadelphia, who is an old paver, tells me that he worked on extensive repair work on cobble pavement as late as 1910.

"I cannot give you the total mileage of streets paved with cobble. On January 1, 1924, there were less than four and one-half miles and about three and three-fourths miles of rubble. As to total mileage of paved streets we have very accurate reports from the year 1891 to date, and in 1891 there were in the City of Philadelphia a total paved mileage of seven hundred and fifty-six miles plus an additional of thirty-seven miles of macadam. At the same time there were four hundred and fifty-two miles of unpaved streets.



PAVER'S RAMMER

The cost of paving varied so greatly that it is interesting to note the prices specified as the maximum in the 1868 ordinance. At the present time our paving figures per square yard for the smooth dressed granite blocks, including a concrete base with a cement sand cushion and grouted surface, is approximately \$7.50.

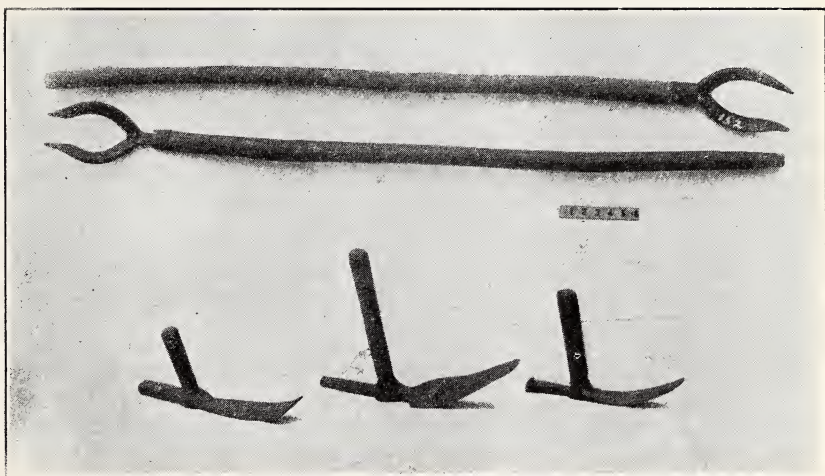
"As far as I can ascertain there is no record of the price the City paid for cobblestones, nor do I have any method of ascertaining the unit of value whether by the ton, perch or boat load.

"In reply to your question as to organized labor—the Pavers and Rammers Union of America has three locals at the present time in Philadelphia, namely, Nos. 46, 54, and 77. This Union is affiliated with the American Federation of Labor. It was organized in this city about 1910. About the year 1900 paving was paid for at the rate of \$1.75 per ten-hour day. About 1910 the price was \$2.75 per nine-hour day. During 1926 the Union workers received between \$11 and \$12 per eight-hour day, and their contemplated demands for 1927 are \$13 per eight-hour day.

"Relative to the question as to the liability of street passenger railway companies for the paving of streets occupied by them, I can state that even prior to 1890 these companies endeavored to avoid their obligations of paving the streets which they occupied with rails. They carried the matter through the Court, losing each time and finally on October 5, 1891, the Supreme Court of Pennsylvania decided that the passenger railway company within the city limits of Philadelphia must repave with improved pavements all streets occupied by them from curb to curb. At this time the City had 756 miles of improved streets of which quantity approximately 282 miles were occupied by street railway companies. We are today working under what is known as a 1907 Agreement, which was approved by the Mayor July 1, 1907. At that time the Phila-

delphia Rapid Transit Company controlled the underlying companies and the agreement was made with it. At that time they were relieved of 479 miles of street maintenance, in consideration of which they were to pay to the City Treasury each year a sum of \$500,000 for a period of ten years, after which time the amount increased on a sliding scale."

I now wish to show to you and present to our society these grappling tools, also the tools procured for this society by Mr. Myers (exhibiting and explaining tools). These tools were used by the pavers and rammers in laying cobblestones as well as rubble and granite block paving.



UPPER—Forks for grappling boulders from bed of river.

LOWER—Paving tools used for setting paving blocks in streets.

The Early History of Point Pleasant

By WARREN S. ELY, DOYLESTOWN, PA.

(Point Pleasant Meeting, September 10, 1927)

THE history of the English settlement of the section of Bucks County lying along the Delaware River between Centre Bridge and Durham pertains more particularly to the period between 1735 and 1760, a half century and more after the Quaker settlement of lower Bucks. The Quakers were good judges of land for agricultural purposes and like the Germans who arrived later shunned the rocky hillsides along the Upper Delaware and its tributaries. Even the speculative ventures of the second generation of the Quakers in taking up land in Upper Bucks, in Plumstead, Bedminster, Richland and Springfield show their shrewd discrimination in this respect.

There was also another reason for the slow settlement of Tinicum. The Indians remained longer in that section than in the other lands of Upper Bucks lying further westward. Just prior to the Indian Walk of 1737 (made in consummation of the purchases of 1686, for as much land lying between the Delaware and the Neshaminy, above Wrightstown, comprising land as far back in the woods as a man could walk in a day and a half), the Indians made the claim that the bounds of this purchase would not reach farther than a little above the mouth of the Tohickon. Again, the township of Tinicum, except a small triangular tract lying between the Delaware and the Tohickon at its mouth was laid out in two large tracts each nearly 5,000 acres; the first to Jan Strieper, a German who never came here, and whose land was settled on by squatters; and the second to the Pennsylvania Land Company of London, who leased but did not sell land.

Considering the immediate site of the village of Point Pleasant, we find that the practically whole built-up portion of the village is located on two tracts surveyed to Matthew Hughes of Buckingham, a prominent Colonial justice and legislator, in 1737 and 1740, which comprised the whole river front of the present village from the "Eddy" to the upper limits of the village. The upper tract in Tinicum township crossing the Tohickon near its mouth,

at approximately the site of the bridge now spanning that creek recrossed Tohickon on its eastern boundary near the mouth of Gaddis Run and extended of that width up the Delaware River. The other tract extended from the lower bounds of the upper tract down the river to the "Eddy," extending farther inland than the other.

THE FERRY ESTABLISHED—Immediately south of the latter tract there was surveyed by Warrant dated February 12, 1735, to Enoch Pearson a tract of 100 acres. The line between this tract and the lower Hughes tract was the site of the ferry at the "Eddy." From the minutes of the Board of Property, we copy the following:

"On 11 mo. (February) 16, 1739, Enoch Pearson who, together with Matthew Hughes, having long applied for the grant of a ferry over Delaware River at the mouth of Tohickon Creek, came down without Matthew Hughes, who was sick. It was directed that Richard Mitchell of Durham & Nicholas Scull view the Banks of the River at this point to ascertain its suitableness as the site of a ferry" to go on the Lands of the said Enoch & Matthew and carefully view the banks of the River for discovering the best & fittest place for landing of Boats & Flatts and also the most convenient Road or passage leading to or from such landing place and to make report in the plainest manner of their proceeding to the Proprietary the better to enable him to determine the affair;"

"6 mo. 23, 1739, Matthew Hughes & Enoch Pearson both present after a long Contest about the Grant of the ferry over Delaware River, at last agreed that forsomuch of Mathew Hughes Land as shall be touched or injured by means of the ferry the said Enoch Pearson shal pay M. Hughes at the rate or price of forty shillings for every acre that shall be so touched or made use of by the said Enoch."¹

These minutes show that the ferry was established immediately on the line of the two tracts and the Ferry Road opened in the same year, still open as it comes down the steep hill into the present River Road, is shown on the old drafts as continuing much in the same direction across the site of the present canal across the Hughes tract, and then making an abrupt turn, approaching the bank of the river at nearly right angles thereto.

¹ The Ferry is sometimes referred to in our county records as "Mathew Hughes Ferry," and he may have been a partner of Enoch Pearson. This Enoch Pearson was a son of Laurence Pearson, an early Quaker who with his brother Enoch and other children of Edward and Sarah (Burges) Pearson came from Pownal Fee about 1687, and a few years alter settled in Bucks County. Enoch Pearson, the ferryman, died in 1748 and his father, also a resident of Plumstead, died in 1758 at an advanced age.

The old Ferry road from the River road westward is still open, extending southwesterly through Plumstead, part of it now occupied by the old Danborough and Point Pleasant Turnpike, now a State Highway, passing through the lands then belonging to the Friends Meeting House and at Danborough passing back of the old tavern and continuing through Fountainville to Butler's Mill, now Chalfont. This road was the principal route of the early settlers here to points westward and to Philadelphia for many years. It was intersected by the road running northward or northwestward from Barcroft's Mill (Carversville), laid out at about the same date, which connected with the road to London's Ferry below Frenchtown.

CAVE BANK FISHERY—On October 2, 1740, Enoch Pearson conveyed fifty acres of land, including the site of the ferry to Daniel Dawson of Philadelphia, who by will in 1744, devised it to his son of the same name and daughter Mary, the wife of John Thompson. The latter became the proprietor of the ferry, his brother-in-law, Daniel Dawson Junr, conveying to him his interest in 1747.

On May 21, 1748, Thompson conveyed it to John White of this place, "Miller": and he on the same date conveyed seven-eighths interest therein to seven other residents hereabouts, retaining one-eighth himself, and these eight men composed the Cave Bank Fishery Company, who continued to own it and operate a fishery, hotel and ferry on the site for near half a century.

Little is known to the writer of the history of the ferry or Fishing Company from that date. The eight proprietors of the Fishing Company seem to have been John White, John Hart, Jane Hart, Hezekiah Rogers, Ezekiel Rogers, John Myer, Elias Carey and Rolof Sebring, all landholders nearby. Michael Swartz seems to have acquired the share of Hezekiah Rogers in 1769, and after the death of John White purchased the other seven shares, and became sole proprietor of the ferry. It descended to his children and grandchildren who were known by the name of Black, and gave the name of "Lower Black's Eddy" to the village, the name it had when the first Post Office was established at the Eddy in 1821. When the Post Office was removed to the store north of the Tohickon, with Joseph

Hough as postmaster, in 1826 the name was changed to Point Pleasant. The ferry was known as Black's Ferry for many years. The writer was first of the opinion that General Sullivan crossed here with General Lee's army in December, 1776, (after the recreant and disobedient General Lee had been captured at Baskenridge, New Jersey, by the British,) and joined Washington's command in Makefield in time to take part in the battle of Trenton. Washington had been urging Lee to join him on the west bank of the Delaware for weeks before his capture. He even sent Lord Sterling with a detachment up the River Road to meet him and assist him in crossing, but Lee, not appearing, Sterling, after going as far north as Easton, returned without him. It is stated that Sullivan crossed at "Tinicum," but since there was never a direct road from the Eddy Ferry on the Jersey shore extending towards Morristown and New York it is probable that he crossed at Sherrard's or London's ferry, before referred to as there was a well traveled and direct road from there to Morristown. That ferry being also in Tinicum township was probably the one referred to where Sullivan crossed.

The conveyance of the share of the Cave Bank Fishery belonging to John White at the time of his death shows that no member of the company could transfer his share therein without the consent of the Company, and gives some idea of the plans and proceedings of the Company.

At this point, the author inquired of Penrose Hicks, an elderly and life-long resident of Point Pleasant, as to his knowledge of the continuation of the ferry. Mr. Hicks thought the ferry was in continual operation until the bridge was opened for travel in 1855.

THE MILL AT POINT PLEASANT—The first mill was erected at its present site by John White, the founder of the Cave Bank Fishery. He is mentioned as "Miller" in the deed of 1748 for the Ferry Tract, but there is not sufficient evidence that the mill was erected that early to establish it as a fact. Its ownership was in the name of John White and his brother Joseph, and in a mortgage executed thereon in 1773 it is recited that the two tracts on which the mill was erected were patented to them in 1765, but from the fact that John White is mentioned as an adjoining landowner at earlier dates it is possible that he had

held the site of the mill on Warrant of Survey some twenty years earlier than the date of the Patent, as has occurred in other instances. The two tracts described and bound by the mortgage contained together over 160 acres. In the same year that the mortgage was executed they purchased the upper Hughes tract, and in the partition of the several tracts owned by them in 1784 between Joseph White, Sr., and the heirs of his brother John, the latter tract and a part of the mill tract lying below Gaddes Run was set apart to Joseph, who sold it to John Van Fossen, who established a fishery thereon, in connection with John N. Solliday, who like many others of his family was a clock and watch maker. He owned considerable land in and near the village as well as islands in the Delaware and was prominent in the public affairs of the community.

Joseph White, son of John, conveyed the mill property and 134 acres to Henry Dotterer in 1795, and he, a year later, conveyed it to Edward Humphreys. It was sold by the sheriff in 1803 as the property of Humphreys to Melchor Heavener, who immediately conveyed it to Jacob Stover, then the proprietor of the mill at Erwinna. Jacob Stover conveyed it to his son, Henry S. Stover, in 1816, and he in turn conveyed it to his son-in-law, Ralph Stover, as 152 acres having added to it part of a tract of $32\frac{1}{2}$ acres patented to Jacob Stover in 1805, and included in the conveyance to Henry S. in 1816. The conveyance to Ralph Stover was made in 1841, and he and his son continued to operate it until quite recently. The mill was a noted one in its day, particularly the saw mill which turned out large quantities of hardwood lumber for shipment to distant points.

THE DELAWARE BRIDGE AT POINT PLEASANT—Point Pleasant Delaware Bridge was erected in 1853-5. Three hundred and twenty-seven shares were subscribed at a par value of \$50 per share, and at the first stockholders' meeting, June 18, 1853, the following officers were elected: President, Ralph Stover; Treasurer, Samuel A. Smith; Secretary, John W. Cowell; Directors, William R. Brown, Joseph Hough, Benjamin Harwick, Christian Myers, Elias Morris and Samuel Lowder.

The Secretary was directed to advertise for proposals for building the bridge in the Flemington and Doylestown papers. The contract was awarded to Hood & Steel, July 9, 1853. The

toll house was let to John White, April 1, 1855. Joseph Cowell's "Farm Bridge" across the canal was directed to be rebuilt and kept in repair. Joseph Cowell to pay over to the company \$250 received from the Canal Commissioners.

The bridge was not finished according to contract, and the contractors were notified that they were discharged in May, 1855, and all sorts of difficulties were encountered. The sheriff levied on the unfinished material for debts of the contractors and a cross suit was instituted against the sheriff for trespass, but the bridge was finally finished. John White was the first toll collector, and a rate of tolls was fixed. Persons residing on either side of the bridge with business on the opposite side were charged but one full toll both ways, and business and professional men, including Dr. A. M. Cooper, were allowed yearly and special rates. The bridge was completed and opened for travel May 26, 1855.

Ralph Stover was annually re-elected as president of the company until 1877, when Elias Morris was elected and Stover became treasurer. Samuel Nash became secretary in 1856. Samuel A. Smith resigned as treasurer in 1858, and Fox Van Fossen was chosen, Smith becoming secretary, in which position he served until his death in 1861 and John N. Solliday succeeded him. Jacob Hughes succeeded John White as collector, and Charles VanLuvanee was appointed collector in 1859, but served only one year and was succeeded by William P. Hicks, who served until his death in 1877 and was succeeded by his widow Martha and son Penrose. John Climer was elected secretary and treasurer in 1866, but declining to serve as treasurer, John N. Solliday was elected to that position.

The company had a suit with Hood & Steel, the defaulting contractors, in 1861, in the Common Pleas Court.

The bridge was damaged by the flood of June 5, 1862, making it altogether unsafe for travel. There being no funds in the treasury to repair it, the stockholders agreed to contribute \$5 per share to raise a fund for that purpose. The stockholders' meeting on March 9, 1858, was at "Point Pleasant Seminary." Can anyone in our audience give us a history of this institution? The response to this query was that the place of meeting was doubtless the new school house then recently erected on the hill.

Any sketch of this section that does not give some attention

to the careers of its men of prominence is necessarily incomplete, but I feel that in most instances these matters get more attention than the incidents of local history relating to the development of our country, and I have given so much of my time to these matters that, in addition to my want of data in reference to your more conspicuous characters, must be my excuse in failing to refer to them.

The pioneer ancestor of the Gaddis family, which family gave the name to Gaddis Run, was John Gaddes, to whom and William Gaddis there was surveyed on October 19, 1739, a tract called "Gambia," 128 acres lying on both sides of the Run, which with an adjoining tract of 125 acres laid out to John Hyder, was patented to John Gaddes in 1774.

Samuel A. Smith, before referred to, was quite a noted character in the political affairs of the county, filling a number of official positions, including a term in United States Congress.

General Joseph Hough, Ralph Stover and a number of others deserve more than the incidental notice given in this brief narrative.



PALISADES AT THE NARROWS OF NOCKAMIXON

Showing bluffs of New Red Sandstone (Triassic) with an elevation of about 400 feet. Pleasure boat "Zlotub" leaving Narrowsville lock on the Delaware Division canal September 8, 1908
(Photograph by Dr. B. F. Fackenthal, Jr.)

Improving Navigation on the Delaware River with Some Account of Its Ferries, Bridges, Canals and Floods

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(Point Pleasant, Bucks County, Pa., Meeting, September 10, 1927)

(Revised April, 1932)



THE Delaware River is about 310 miles long, from the Catsbergs to the Delaware Bay, having for its source little rivulets dripping down the western slope of the Catskill Mountains in Schoharie and Delaware Counties, New York, forming at its base two wild streams, bearing the Indian names of Mohocks on the west and Popaxtunk on the east, which are fed by numerous accessories and unite to form the beautiful Delaware, one of the most limpid streams in all America.

The Mohocks or West Branch or as sometimes called the Little Delaware forms the boundary line between Pennsylvania and New York for seven miles, to a point just south of Hancock, N. Y., where it is joined by the East Branch (Popaxtunk), and from there to Port Jervis the main stream forms the boundary between the same two states. At Port Jervis, N. Y. (opposite Matamoras, Pa.), where the river encounters the Shawangunk Mountains, its course is diverted, turning south at a right angle, and from there to the state of Delaware it forms the boundary between Pennsylvania and New Jersey. In New Jersey this range of mountains is called Blue Mountains and in Pennsylvania the Blue or Kittatinny range. At Tri-State (Carpenter's Point) near Port Jervis, a monument has been set up to mark the point where the three states meet.

By reason of the river forming the boundaries between the three states, with branches entering the stream from all of them, each state is claiming jurisdiction over a certain part of the water. In order to determine the amount to which each state might be entitled to withdraw, their respective legislatures in 1922, enacted laws, asking their governors to appoint commissioners to determine the areas of the water-sheds, on which was to be predicated the quantity of water to which each was entitled.¹

¹ Pamphlet Laws of Pennsylvania for 1923, page 448; Laws of New Jersey for 1923, Chapter 94; Laws of New York for 1923, Chapter No. 56.

These commissioners entered into a "compact," and made their first report May 24, 1925, and their second one on January 13, 1927, defining the water sheds, and apportioning the daily flow of water that each state might be entitled to withdraw, as follows:

To Pennsylvania—900,000,000 gallons; to New Jersey—600,000,000 gallons; to New York—600,000,000 gallons, a total of 2,100,000,000 gallons per day. Neither of these reports was approved by the legislatures of Pennsylvania or New Jersey, but both were approved by the State of New York. Whereupon the State of New York declared its intention of taking the water allotted to it to supplement the supply for New York City; taking it from the following streams, all wholly within the limits of the State of New York:

Streams ²	Location of dams	Counties	Watersheds square miles above dams	Diversion per day in gallons
Little Delaware or West Branch.....	Delhi	Delaware	50	40,000,000
East Branch.....	Downsville	Delaware	370	370,000,000
Beaver Kill.....	Beaver Kill	Sullivan	60	60,000,000
Willowemoc.....	Parkston	Sullivan	60	60,000,000
Neversink.....	Curry	Delaware	70	70,000,000
Total.....				600,000,000

On May 22, 1929, the State of New Jersey filed a complaint in the United States Supreme Court to restrain the State of New York and the City of New York from diverting any water from the Delaware or its tributaries, and on December 9, 1929, Pennsylvania filed a petition to intervene, which was granted. On January 27, 1930, the United States Supreme Court appointed Hon. Charles N. Burchard special master to take testimony. The master began the duties of his appointment on February 25, 1930, and after devoting 63 days to the hearing, rendered his decision permitting the State of New York and the City of New York, under restrictions, to take 440,000,000 gallons of water per day from but two of the branch streams above referred to. His opinion was confirmed by the Supreme Court on May 4, 1931. I am informed by the assistant attorney general of New Jersey,

² A dam at Delhi would be the only water to be taken from the West Branch. Beaver Kill and Willowemoc are tributary to the East Branch, and the dams at Beaver Kill, Parkston and Downsville would take water from the East Branch. The dam at Curry would draw water from the Neversink.

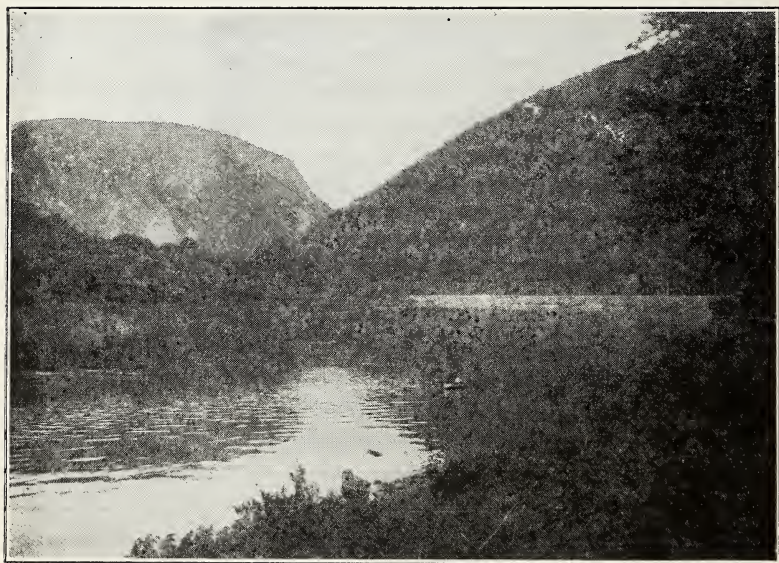
that the decision being for a less amount than asked for, together with the restrictions placed upon them, and the development of the fact that other sources of supply were pointed out, make it doubtful whether New York will draw any water from the Delaware or its branches for some years to come.

It developed at the hearing before the special master that if the City of New York was permitted to divert 600,000,000 gallons of water per day, that the flow in the Delaware at Tri-State, near Port Jervis, would be diminished by from $14\frac{1}{2}$ to 16 per cent.; at Riegelsville, $11\frac{1}{2}$ per cent., and at Trenton, 8.2 per cent. This indicates that if the compact of the commissioners had been adopted, and the three states allowed to take 2,100,000,000 gallons per day the loss at Tri-State would probably amount to 52 per cent. of all the water at that point. The engineers reported the area of the water-shed drainage as 2,390 square miles in New York, 760 square miles in New Jersey and 3,345 square miles in Pennsylvania, of which 980 square miles were above Port Jervis. Prior to the State of Pennsylvania taking over the Delaware Division canal on October 17, 1931, the greater part of the water from the Lehigh river, under normal conditions, was diverted at Easton into the Delaware Division canal, and not returned back into the Delaware before reaching tide water at Bristol.

Diverting water from the Delaware, and not returning it back into the stream would greatly interfere with the plans of the Deep Water Way Commission, appointed by Congress, of including the Delaware for improvement, with dams for slack water navigation, and to some extent weaken it for installing water powers along its course, which would be regretted, as it appears to be almost suicidal to continue exhausting our coal mines, and allow streams like the Delaware to flow by our doors without harnessing them for power plants. On the other hand, our great cities have need to add to their water supply.

The course of the Delaware is through a mountainous country, passing through many gorges, of which the Delaware Water Gap is the most pronounced. At that place the river passes through the Kittatinny or Blue Mountains, which rise on both sides thereof to heights of 1,300 and 1,400 feet. There are evidences to show that many of these gaps or gorges, in prehistoric times, formed dams or barriers, which impeded the flow of the

stream. Whether these obstructions were of rock which wore away by erosion, stratum after stratum, or whether the gorges were choked with ice or debris, can never be satisfactorily determined. The great height of the obstruction at the Delaware Water Gap caused the formation of a great lake, backing the water on both sides of the river for many miles through the Neversink valley and even as far as the Rondout valley in New York state, and through the Delaware valley as far as Lackawaxen, where the battle of Minisink was fought. Since the giving way of the dam or obstruction at the Delaware Water Gap by erosion or otherwise, the bed of the drained lake has been known as the "Minisinks," meaning "The Water is Gone," or as some interpret it, "The Home of the Minsies." The great height of this lake, as geologists tell us, caused the water to overflow and find an outlet through the mountain pass at the Wind Gap, some eleven miles to the west. At the Delaware Water



DELAWARE WATER GAP

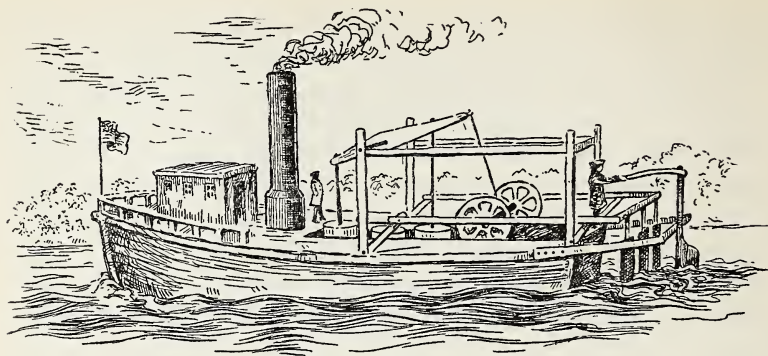
View looking south. Mount Minsi and the D. L. & W. Railroad on the right or Pennsylvania side and Mount Tammany on the left or New Jersey side.

Gap, it is said, there is still to be noticed a deep depression in the bed of the river, where the water fell over the barrage.³

In like manner the Weygadt Mountain above Easton, and Rocky Falls, one mile above Riegelsville, where the Delaware cuts through the granite of South Mountain, also the Narrows at the Palisades of Nockamixon, where it cuts through the New Red Sandstone (Triassic), there are evidences of the river having been similarly obstructed. This is indicated by the deposits of river sands in what are probably beds of drained lakes. Along the eastern part of the borough of Riegelsville the glacial-drift extends to the river, and doubtless underneath thereof, while the river sands lie on top. The same river sands can be seen in the fields northwest of Riegelsville at the base of South Mountain, some 50 or 60 feet above the river. In the bed of the Rocky Falls Lake, about ten feet underneath the sands, and about forty feet above the river, on removing the sand for use in pig beds of blast furnaces, there was discovered, in 1895, the remains of an Indian fireplace. This was carefully examined by Dr. Henry C. Mercer and other noted archaeologists, to determine whether there was any evidence of its antedating the glacial period, but they found the remains covered only by river sand. A photograph of this terrace, on Fry's Run in Williams Township, Northampton County, showing depth of sand and position of fireplace, can be seen in the album of the Bucks County Historical Society at Doylestown. There has in fact been no well authenticated evidence of prehistoric man found underneath the glacialdrift at Rocky Falls or elsewhere.

There is a long spread, and many years intervening, between the birch bark canoe of the aboriginies and the modern steamers which now enter the river at the Delaware Breakwater. This, however, is but one of the developments that has followed the evolution and civilization of the history of the world. There has been no regular steam navigation on the Delaware above Trenton. All attempts to ply steamboats higher up the river resulted in failure. John Fitch of Bucks County, Pennsylvania, was the inventor of the steamboat. In 1785, he built an experimental boat with side wheels, which he propelled by steam on a milldam near Davisville in Warminster Township, Bucks County.

³ See "The Delaware Water Gap," by L. W. Broadhead, Sherman & Co., Philadelphia, 1870; also Hazard's Register, Vol. I, page 428, and Vol. III, page 407.



JOHN FITCH'S PASSENGER STEAMBOAT ON THE DELAWARE RIVER

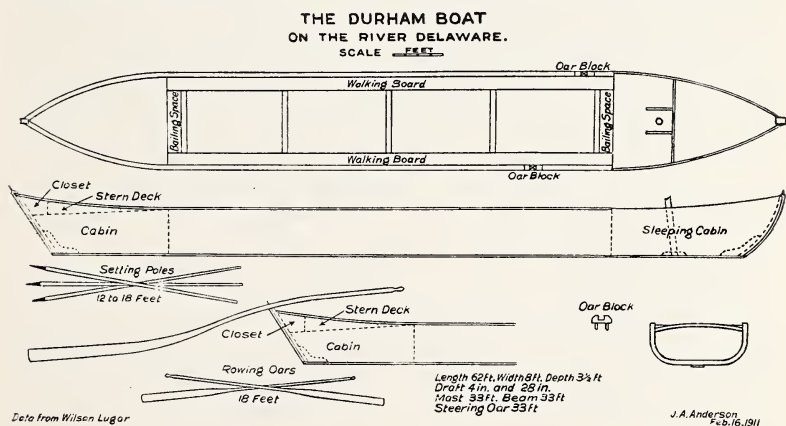
In 1788, he built a passenger boat, and after experimenting and making trial trips, put it in regular service in 1790 on the Delaware River between Arch Street, Philadelphia, and Trenton, making stops at Burlington and Bristol. He sailed it north every Monday, Wednesday and Friday, and returned every Tuesday, Thursday and Saturday during the months of June to September, inclusive. His experimental boat was 22 years and his regular passenger service was 17 years before Robert Fulton sailed his "Cleremont" in 1807 on the Hudson river.⁴ While there were many kinds of small craft used for transportation on the lower waters of the Delaware, it remained for the Durham Boat to operate on waters higher up on a commercial scale. That model of boat was first used by the Durham Iron Company in 1727, to transport the products of the Durham furnace and forges to Philadelphia and carry "back-loads" of merchandise on return trips. That model of boat always called "Durham Boat," was used on the Mohawk and other streams throughout our country, also on the St. Lawrence River.⁵ Durham Boats played an important part on Christmas night of 1776, when Washington and his army crossed the river and surprised the British at Trenton. With the completion of the Delaware Division of the Pennsylvania Canals from Easton to Bristol,

⁴ See Bucks County Historical papers, Vol. II, page 22, and Vol. III, page 565.

⁵ See Miss Susan Copper's introduction, in 1805, to her father's book, the "Pathfinder," Household Edition, 1876, published by Houghton, Mifflin & Co. This introduction does not appear in all the editions of Fennimore Cooper's works. See also The Early History of Green Bay, Wisconsin, and the Fox River Valley by J. W. Arndt, 1904.

opened permanently for navigation in 1834, the use of Durham Boats began to decline, and with the opening of the Belvidere Delaware Railroad in 1854, they were found to be no longer necessary. The last trip by Durham Boat, through to Philadelphia, is said to have been made by Isaac Vanorman starting from Easton March 6, 1860. The last one known to have been in practical use, was fitted up by John Nicholas, in the late sixties, to operate on the canal for carrying garden produce from his farm, near Kintnersville, in Durham Township, to Easton, but alas, that was not operated on the river, and the poetry of its primitive motion was gone, for it was propelled by a team of horses, but all the same it was the dying ember of a primitive and bygone industry.

For a most interesting history of the Durham Boat, in fact, the most reliable and best paper that has ever been written on that subject, I beg to refer to the paper of Mr. John A. Anderson, published in Volume IV (pp. 282, et seq.) of the Bucks County Historical Society, from which the following drawing is taken:



DRAWING OF DURHAM BOAT BY JOHN A. ANDERSON

Made in 1911 from his personal recollection of shape and size and from information obtained from others.

RAFTING ON THE DELAWARE RIVER

To Daniel Skinner must be given the honor of navigating the first raft down the Delaware River which he started in 1764, from Cochection Falls, about forty miles above Port Jervis.⁶ This was the beginning of any industry that grew with the development of the country. Hazard's Register (Vol. III, page 384) records that in the spring floods of 1828, as many as one thousand rafts passed down the Delaware, made up mostly of boards, planks and other sawed stuff, estimated at fifty million feet, which originated in Delaware and Sullivan Counties in New York, and Wayne County in Pennsylvania. Alfred Mathews' History of Wayne, Pike and Monroe Counties, published in 1886, at page 960, says: "It is estimated that fifty million feet of lumber and logs were run down the Delaware River annually some years ago, and the Lackawaxen furnished a considerable share of this lumber. The average raft of round timber was 65,000 feet, although they often ran larger rafts, and of sawed lumber they sometimes had 200,000 feet in one raft." Mr. Ethan Allen Weaver records that in the thirties it was not uncommon, during a favorable flood of water, for two thousand rafts to pass down the river in one season; his information was derived from files of old newspapers.⁷ This industry reached its height from 1840 to 1845, and begun to decline about 1855, after the railroads were put in operation. The passing of this industry seems to have been in 1907, when several rafts passed down the Delaware. It therefore covered a period of about 150 years.

During the fall of 1883 the *Walton Chronicle* of Walton, N. Y., published a series of articles from the pen of an old raftsman,^{7½} which enter into the detailed history of lumbering, building and assembling rafts, rafting and navigating the West Branch of the Delaware, and of the main stream beginning at Hancock, where the West Branch and the East Branch unite, and from there to Philadelphia. These papers give a detailed account of his personal recollections of the entire industry, including the personnel of the lumbermen, raftsmen and steersmen, the loca-

⁶ History of Wayne, Pike and Monroe Counties, page 445.

⁷ Historical Sketches, by Ethan Allen Weaver, page 47—A collection of papers contributed to the Easton Free Press, and reprinted.

^{7½} Written by Joshua Pine (the third), born at Walton November 5, 1798, died there April 13, 1888.

tion of the sawmills and other details, making them quite unique and from which we have obtained the following data:

In building a raft an incline is selected, or an artificial one made, on which a frame composed of "grub plank" is built for a "crib." This crib or float is from 16 to 18 feet long and from 16 to 22 feet wide. These cribs are launched as fast as made, and as many used as are required for the size of raft to be built. If four or five it is called a "colt," if from eight to ten it is called a "raft," i.e., a "single raft." When two single rafts are placed side by side it makes a "double raft" or "fleet."

The cribs and colts are merely skeletons or frames used as foundations on which to build the rafts. After they are launched and coupled together, lumber is loaded on them to a depth of from 21 to 27 inches. This indicates about 150,000 feet of lumber on double rafts. Single rafts had but two oars, one at each end, while double ones had four, two at each end. The steersman handled the right hand oar at the tail end as the raft floated down stream. The oarblades were made of hard wood, usually maple, they were from 12 to 14 inches wide, and from 14 to 16 feet long, sawed two inches thick at the butt and three-fourths of an inch at the tip end. The tillers were seven inches in diameter at the butt by 40 feet long, made of hemlock, pine, poplar or bass, the latter being preferred. The oars were carefully hung, so as to be perfectly counterbalanced.

In addition to the sawed lumber there were large numbers of rafts composed of logs, these were mostly to supply the sawmills located along the main stream south of the timber belts; some of these main river sawmills disposed of their surplus sawed lumber by rafting it and floating it to the Philadelphia market. These log rafts were mostly hemlock, in fact, the forests produced much more hemlock than of any other kind. A great number of railroad ties, ship-knees and hoop poles were often shipped on rafts to Philadelphia.

Lumbering was carried on not only on the main channel of the West Branch, but back into the forests, with many sawmills on the tributaries to their sources. In like manner lumbering was carried on with equal activity along the East Branch. There was also great activity in lumbering on the main stream and its tributaries below the confluence of the West Branch and the East Branch. Hancock was said to have been the very center

of the lumbering industry, and where many lumbermen made a gathering place and where many of them lived.

White pine and other lumber was also drawn in large quantities from the banks of the Susquehanna and its tributaries. The *Walton Chronicle* correspondent mentions particularly that large quantities from sawmills at Davenport on the Charlotte Creek were carried over the divide between the Susquehanna and Delaware rivers, thence by Elk Creek, a total of 14 miles, to Frisbee on the West Branch $3\frac{1}{2}$ miles above Delhi, where it was assembled into colts, which in turn were made into rafts farther down stream where there was more water. This sawed pine lumber fetched but from \$9 to \$10 per thousand feet delivered at Philadelphia. He also makes special mention of white pine having been drawn over the divide, from Otego, Unadilla and Sidney on the Susquehanna in large quantities.

In 1840-41, two West Branch lumbermen bought 100,000 feet of white pine boards and 25,000 feet of cherry from sawmills on the Ouleout (a branch of the Susquehanna) for which they paid \$6 per thousand and \$2 for carting to Walton on the West Branch, where it was rafted and sent to Philadelphia and sold for \$10 per thousand; this apparently left the speculators but \$2 per thousand or say \$250 on the transaction, out of which they evidently paid for floating it to market, besides taking the risk of having it "stove" enroute. This would hardly satisfy twentieth century lumber dealers. The correspondent says there was a splendid growth of white pine at Walton, where he lived, and where the West Brook enters the West Branch.

Some of the raftsmen, on their journeys down stream, well knew where liquor could be had, and as they approached their favorite hostelrys, they would call loudly to the inn-keeper, who would gladly row out with an assortment of bottles. The writer of these notes, living in Durham Township, often witnessed the innkeeper, whose establishment was in New Jersey, opposite the Durham furnace, row out to meet the rafts. To his mind they never seemed to be in a hurry, and by the time each had been served with his favorite tipple, the rafts with the inn-keeper and his bateau had drifted down stream fully three-quarters of a mile. By the time he rowed back another set of thirsty raftsmen would signal and yell at him, whereupon the operation was repeated, and thus kept up all day long during the rafting season.

During rafting season it was almost a daily occurrence to see broken rafts floating down stream past Durham that had been "stoved," that is wrecked and broken apart, many of them by striking the piers of the bridges between Easton and Phillipsburg. The scattered timber and logs from such broken rafts were often salvaged by watermen living along the river, which was quite a profitable undertaking, but often the owners would put in an appearance and lay claim to them, particularly if they had taken the precaution of stamping their initials on the ends thereof.

While many of the steersmen from up river were acquainted with the channel through to tide water at Trenton (from which place the rafts destined for Philadelphia points were taken by tow boats), some came down only as far as Easton or Riegelsville or Upper Blacks Eddy, where they employed local steersmen for the remainder of their trips. Two of these, both living on the New Jersey side of the river at Riegelsville, were expert steersmen, and their services were in constant demand during rafting seasons. One of these was William Piatt, known as "Lofty" Piatt, a hardy, rugged man who stood six feet, three inches in nature's socks, and whose portrait is shown on the margin hereof; the other was William Crouse (born 1802, died 1884), who knew the channel so well that he often, for a few dollars extra, insured the safe arrival of the rafts to their destination.



"LOFTY," ALIAS WILLIAM PIATT
1818-1908

His son, Rutledge T. Crouse, advises me that while one trip from Upper Blacks Eddy to Trenton (34 miles) was a full day's work, that: "on one occasion, when it was moonlight, his father made two trips in one day, coming back from the first by railroad train, to Milford, N. J., where he crossed the river and stepped on another raft which was waiting for him." Another local steersman was Orrin Eddy, who made his home at Easton. From information obtained from his great-grandson, he piloted rafts on the Delaware from 1820 to 1840. These local steersmen were also employed to run rafts of "sawed-stuff" from local sawmills at Easton, Riegelsville and many other places along the river.

ANTHRACITE COAL CARRIED TO MARKET ON ARKS

Anthracite coal was first discovered by Philip Ginther, accidentally, at Summit Hill, in the Lehigh field in 1791, and fifteen years later, in 1806, an experimental ark was built by William Trumbull at Lausanne (five miles above Mauch Chunk, where the Nesquehoning Creek falls into the Lehigh), which carried 300 bushels (about ten tons) of coal to Philadelphia, but there was no demand for it, as it could not be sold for heating purposes, therefore part of it was thrown on the streets.⁸ It was not until August 9, 1814, that this mode of transporting coal was begun in a practical way, when what was called "the first ark," was loaded with twenty-four tons of coal and set out for Philadelphia. The Lehigh was wild, full of rocks and the channel crooked, and within a quarter of a mile from the place of starting, the ark struck a ledge of rocks which knocked a hole in her bow. With much difficulty they succeeded in stopping the leak and then proceeded on their journey, reaching their destination August 14, six days out from Mauch Chunk.⁹ From that time forward, until the Lehigh and Delaware Division Canals were opened, shipments by ark continued. The arks were built of sawed timber in a square, boxlike form 16 by 18 feet wide and from 20 to 25 feet long. After discharging their cargo at point of consignment, usually Philadelphia, they were taken apart and the lumber sold, thus requiring a new boat or ark for

⁸ Henry's History of the Lehigh Valley, page 378, and History of Northampton County, page 58.

⁹ Henry's History of the Lehigh Valley, page 380, also Hazard's Register, Vol. V, page 271, and Vol. VI, page 275.

each cargo of coal.¹⁰ Canal transportation followed the arks, to be superseded by the railroads, branches or sidings of which enter every operating mine and coalbreaker. This fuel, called "stone coal," which it was not at first known how to use, grew into popularity very fast. In 1820, 365 tons were sent down to Philadelphia, which completely stocked the market. In the year 1927, the production of all anthracite mines in Pennsylvania, amounted to 70,454,000 gross tons. It appears that the canals of the Lehigh Coal & Navigation Co. (the Lehigh and the Delaware Division) are (1932) the only canals remaining in the entire country, using boats propelled by mule power. As stated elsewhere in this paper, navigation was permanently closed on the Delaware Division Canal on October 17, 1932.

The Lehigh River rises by various mountain branches in Wayne, Pike, Monroe, Carbon and Lackawanna Counties, uniting at the town of Stoddartsville, Luzerne County. Its fall from Stoddartsville to Mauch Chunk is 1,006 feet and from Mauch Chunk to Easton, a distance of forty-six miles, the fall is 364 feet, making a total fall of 1,370 feet. Mr. Charles Miner records that three out of every four arks that left Mauch Chunk were stove and sunk on the way, but that this did not always entail a total loss, as the coal was often salvaged and sold to smiths at Allentown, Bethlehem and Easton.¹¹ Their experience, however, soon taught them that lighter arks with less cargo went through much better.

This great fall and the tortuous course of the Lehigh hindered navigation, and when the river was low there was not water enough in the upper part of the stream to operate to advantage. To overcome these difficulties, Josiah White, acting as his own engineer, devised a system of "artificial freshets," by building dams across the stream to form pools for storing water. Sluices in the dams were provided for passing rafts of lumber and arks loaded with coal through them. The sluices were readily opened and closed by one man by means of hygroscopic power acting in a contrivance known as "bear-trap locks."

¹⁰ Henry's History of the Lehigh Valley, page 414.

¹¹ Henry's History of the Lehigh Valley, page 381.

CLEARING OUT THE DELAWARE RIVER

By act of the Pennsylvania Assembly, March 9, 1771, private subscriptions were authorized for improving navigation on the Delaware River, and on September 28, 1789, an act was passed, and an appropriation made by the State, for clearing out the channel, in order that navigation might be improved. A commission was accordingly appointed, consisting of Timothy Matlack (then president of the Supreme Executive Council), Reading Howell and William Dean, to view the river and determine upon this work, and on October 6, 1789, they were authorized by the council (George Ross, vice-president presiding) to carry the act into effect and proceed with the improvements. Whereupon the commissioners made an inspection of the river and submitted their report January 30, 1790, and in or about June, 1791, entered into a contract with Col. Richard Backhouse, of Durham Iron Works, and Col. George Wall, Jr., of Lumberville, to clear the river of its main obstructions from Trenton Falls to the New York State line.¹² These contractors put the work in hand at once, subletting the clearing of some of the rapids and falls. This is clearly set forth by their official report, made in 1793, copy of which is on file in the archives of the Bucks County Historical Society, in the handwriting of Colonel Backhouse, as is also the account book of Colonel Wall, which contains, somewhat in detail, an account of their expenditures. A copy of their report is attached hereto.

The greatest obstruction in the entire river was at Foul Rift, about three miles below Belvidere, which alone has a fall of 22 feet, as against 9 feet 8 inches at Trenton Falls; 12 feet 1 inch at Wells Falls; 11 feet 1 inch at Tumbling Dam Falls and 11 feet 5 inches at Marshall's Island Rapids. On page 123 hereof is a table, copied from Hazard's Register (Vol. I, page 57), showing the fall in the Delaware from Easton to Trenton, a distance of 49 miles, to be 160 feet, 5 inches. The fall from Port Jervis to Easton, distance 66 miles, is 259 feet. (Hazard's Register, Vol. III, page 104.)

Messrs. Backhouse and Wall placed the work of clearing Foul Rift in the hands of Major Robert Hoops, of Belvidere,

¹² Colonial Records—Vol. XVI, pages 178-181-274-278-346-348-366. See also Statutes at Large of Pennsylvania, Vol. VIII, page 32, and Vol. XIII, page 354.

N. J., who under date of July 16, 1791, addressed the following letter to Colonel Backhouse, applying for the job:

Belvidere, July 16, 1791

Sir:—

I have been informed that you and Col. Wall had contracted to clear the several Falls in the Delaware so as to render the navigation safe and easy. I am willing to engage to clear Foul Rift, and one or two other Falls in the neighborhood, provided we can agree on the price which will depend on the manner you wish it executed, I would therefore wish to have the pleasure of seeing you here and agreeing on the spot, it is now time that work of that nature was begun, if it is to be completed this fall. I would just observe that Foul Rift is the most shallow, rapid and dangerous Falls in the River. Should you and Col. Wall wish to view the river higher up, I will endeavor to accompany you.

I am, Sir,

Your most obedient Humble Servant

ROBT. HOOPS¹³

Two letters from Major Hoops to Colonel Backhouse, telling of his progress in opening the channel through Foul Rift, have been preserved. One which belonged to me was presented to Miss Mary S. Clark, of Belvidere, the other is in the manuscript department of the Pennsylvania Historical Society at Philadelphia. These letters state that his work was interfered with by the Indians raising the hatchet against him, and are otherwise so interesting that I append the following copies:

¹³ Maj. Robert Hoopes came to Belvidere about 1770, and purchased the mill and water power. He built and operated an extensive slaughter-house on the south side of the Pequest, and sent the product, together with large quantities of flour manufactured at his gristmill, into the interior of the state of New Jersey, for the Continental army. He was progressive and the pioneer merchant of Belvidere. He first named the town "Mercer," but later changed it to "Belvidere." He was on the staff of Gen. Philemon Dickinson during the Revolutionary War. He was appointed County Judge of Sussex County (which then included Warren) at a joint meeting, November 17, 1779, and again reappointed in 1784 and again in November 20, 1789. In 1792 the village consisted of a gristmill, on the site now occupied by the "old mill," a sawmill on the opposite side of the Pequest and six dwelling houses. At that time the principal part of the land north of the Pequest was owned by Major Robert Hoops, who gave the place its name of Belvidere, probably from the beauty of the situation; while that on the south side, including the water-powers, belonged to the celebrated Robert Morris, who on November 15, 1793, entailed it upon his daughter, the wife of Charles Croxall and her children. (Historical Collections of New Jersey by Barber & Howe, page 503.)

COPY OF LETTER PRESENTED TO MISS MARY S. CLARK, OF BELVIDERE, N. J.,
BY DR. B. F. FACKENTHAL, JR.

Belvidere, Sunday 8th August 1791

Dear Sir

The day you left me in the afternoon with seven Hands I made a beginning and completed a passage through the little foul Rift for a Boat to pass with 100 or 150 Bushels without touching; & was it not for the three Points where the Hatchet was raised against me, I should be perfectly easy—but industry and perseverance will I hope overcome all difficulties.

I have desired the Bearer my Negro Boy Jack to return to me as speedily as you can dismiss Him, as no time must be lost. I shall set some hands at work tomorrow before I set out for your House & wish as little detention as possible as I am determined to return again on the same evening having engaged some more hands for Tuesday Morning—

I am with best Wishes Dear Sir

Your most Obdt. Servt.

To Richard Backhouse Esqr
Durham

ROBT. HOOPS

COPY OF LETTER IN POSSESSION OF THE PENNSYLVANIA HISTORICAL SOCIETY

Balls Rock 26 August 1791

Dear Sir

With all industry & indefatigable labor of twenty & sometimes thirty men I am yet at this place and tho I have blowed up the bed of Rock between the projecting part and the shore and sunk it at least eight Inches I have not yet water enough for a Loaded Boat. I have extended the wing from Balls Rock up to the ledge that crosses the River without having any good effect. I fear it never will answer the desired purpose, it has been a most difficult & expensive piece of work, and was obliged to get some stone off the mountain and roll them down the water upon an average about eight feet deep and so swift that it carried off the largest Rocks I could put in, the quantity it took is incredible. I have not lost one day rain or shine since I began except part of a day I went to Court—I am now in want of Money & request you will send me or Bearer Thomas Harmon about one Hundred and Fifty Pounds, & will not trouble you for some time again. I am determined if possible to compleat the Work this fall. I have cleared almost every obstruction up to the point where the Hatchet was first raised against me, have now five Men Blowing it and all the Rocks that lay in the Channel—I really wish you could take time to come and see me—My House and Family of old wicked Boys move up with me to this point tomorrow. My hand is stiff I can hardly write.

I am Dear Sir in Haste

Richard Backhouse, Esqr
Durham

Your most Obdt Servt

ROBT. HOOPS

As these letters from Major Hoops indicate, boats could not pass through Foul Rift prior to the improvement of 1791; in fact, it is quite a feat to shoot the rapids at the present day, even with a small boat or canoe. Merchandise from Belvidere and vicinity, for river shipment, was hauled to a point below the rift, including the product of the Oxford, N. J., blast furnace, built in 1743.

In 1921, my friend, Dr. Porter W. Shimer, of Easton, discovered, cut in the limestone rocks, on the Pennsylvania side at Foul Rift, the following inscription:



R+HOOPS 1791
 cleared these Falls ~~~~~
 T MATLACK J MIFFLIN
 Commissioners ~~~~~

At that time he made, expressly for me, a rubbing of the cartouch, which is about 9 inches high by 18 inches wide. Owing to high water, he could not get a photograph of it, but in the summer of 1926 succeeded in getting a splendid negative, from which the etching shown herewith was made. On April 5, 1790, the Pennsylvania Assembly passed an act appropriating £40-12-8 to Robert Thorn for clearing Wells Falls and Howells Falls.

REPORT OF WORK DONE ON THE DELAWARE

BY RICHARD BACKHOUSE AND GEORGE WALL, ESQUIRES
(From Copy in Archives of the Bucks County Historical Society)

To his Excellency Thomas Mifflin Esquire
Governor of the Commonwealth of Pennsylvania

Sir

Agreeable to the Request of a Circular from the Secretaries office Dated June the 27th 1793 We beg leave to Submit to your Excellency the following Report of the Progress we have made in the Executing our Contract for the Improving the Navigation of the River Delaware from Trenton falls to the northern boundaries of the State Viz—

From the New York Line to the Head of Cushiction Falls, we contracted with Samuel Preston to finish it and as this is but a Small piece of the Work we expect it is done.

From the head of Cushiction (Cochecton) Falls down to the foot of Tyhock (?) Falls much Labour hath been done and every dangerous obstruction removed Wing Wall's Erected agreeable to the direction of the Agents of information, and the whole we Expect is compleated Agreeable to their direction a Particular account of which is in the Possession of your Excellency, which we delivered last fall when applied for a view & reported to us by Captain Chambers with whom we contracted to Compleat that part of the work.

Sambos (?) Rift one Rock is removed & the channel improved by throwing out loose Stones &c.

Gap of the Blue Mountain (Delaware Water Gap) the channel between Gaps Island and the Jersey is Improved. Adams slip wholly removed & three other rocks below (mentioned in the Commissioners report of Jany. 30th 1790) part of the Rift below taken away and so improved as to make a ample and safe channel through the gap of the Blue Mountain

From the Gap Island down to the Foul Rift—At Bowmans rift a large Rock removed; at the Daming (?) rift the channel improved & a number of Rocks roled away; at Cobus's (Jacobus) rift one removed and the channel improved; at lower Bowmans four removed and other small rocks moved away; at Lowrys three, and at long Rift two, with many small rocks and stones roled away wing Walls made in Sundry Places and the channel deepened & Improved over the Shoals &c.

Foul Rift from the head to the foot was Oct. ye 8th 1791 viewed by the Agents of Information, and by them reported to be finished to their Satisfaction Except three small rocks below Balls Rock which we have since removed & ring Bolts fixed in the remaining part of the oblique Rocks (which was not Necessary to reniove) and a good takel Rope fastened to the Rings in order to enable the boatmen to Tole their boat up that part of the Falls

From the foot of Foul Rift to the Whycot (Weygadt) we have made Wing Walls at Big Capwsh (?) Deepened and Improved the Channel for Boats at low Water

At Whycot (Weygadt) Falls We have scaled the uper rift removed two rocks mentioned in the aforesaid commissioners report, with Several other

small rocks the Lower Rift Sealed. Two Dangerous Rocks Exactly in the Channel (mentioned in said report) removed two Rocks opposite the mountain Removed a great Number of small rocks and stones Rolled out of the Channel so as to render it safe for boats at low water.

FROM THE WHYCOT (WEYGADT) TO HAYCOCK FALLS (ROCKY FALLS)

At the Falls above Easton removed an old Fish Basket Wing & deepened and improved the Channel at the Head of said Falls, and in the Falls removed two Rocks mentioned in the Commissioners Report with several other Small Rocks which appeared might be in the way at low Water

At Philipsburgh Falls removed Two Rocks mentioned in said Commissioners Report, and Improved the channel by Rolling out Several Small Rocks and Stones These falls are finished to the intire Satisfaction of the Easton Boatmen as Certified to us in writing by Justice Auble (Able) who lives there.

Haycock Falls (Rocky Falls) we have opened the channel on the Jersey side, and have made a Wing Wall so as to incline the Ripple above to the Jersey shore and Deepen the Water there, the very large Rock mentioned in the Commissioners Report is intirely removed so that at a Common Boat-Fresh Rafts & Boats may Pass over it, and we have scaled & removed above Thirty other Rocks & Rifts in these falls and Widened & Deepened the Channel so as to render it very safe for Rafts at high Water if they are Careful and Steer near the Jersey Shore at the entrance and Boats may Pass this channel at high or low Water without Danger, and we are informed by Mr. Geo. Clayhunts (Kleinhants) who lives on the Pennsylvania side against the falls that Several Rafts have lately taken that channel and passed with ease & Safety the Channel being straight while the Channel on the Pennsylvania Shore is winding and Difficult. We opened this channel by the Express directions of the Agents against the general opinion of the Boatmen and Raftmen who declared it would be useless as neither boats nor Rafts would take that Course. However we have found to the Contrary and many now use it, and believe in a short time will be generally approved and give full satisfaction. The removing the Rocks in these falls was attended with Difficulty and much Labour and Expense by Reason of the Rocks being intensley Hard, abounding with Fissures, so that many blasts of Powder where Expended to Little Purpose

FROM THE HAYCOCK (ROCKY FALLS) TO THE TUMBLING DAM

At Linns Falls we removed a Fish Basket Wing and removed Several Rocks out of the channel so that it is much Improved

At Stuhl's Falls removed two Small Rocks and Improved the Channel for low water by Rolling out Large Stones and Gravel At the foot of Ridges Island we made a Wing Wall and Improved and Deepened the Barr so as Boats may Pass at Low Water.

At Tumbling Dam we have Scaled the Rift above the Island between this Rift and the Tumbling Dam have Scaled the Rifts and removed many Rocks in the Line of the Channels, The Tumbling Dam Rift we have Scaled

& Widened Westward and Several Rocks Just below the Dam have been Scaled and removed, at the Bottom of this channel where the Cut Bitch Channel meets it. Three Rocks mentioned in the Commissioners Report is removed, and have Scaled and removed part of the Rock in the Tumbling near the Island to ease the Passage for boats going upwards

FROM THE TUMBLING DAM TO WELLS FALLS

At Bulls falls have Deepened Widened and Improved the Channel by Roling out many Loose Rocks Stones &c.

At Howells Falls have made a wing Wall, Deepened and improved the channel by removing some Rocks and many large Stones &c.

At Well's Falls Two Rocks in the Still Water directly above the Entrance rock is removed the Ledge of Rocks westward of the channel is Scaled and the Entrance made upwards of four Perches wide Part of the Beacon Rock taken off, the Rock No. 19 and the Small Rock above Scaled and all the Rocks mentioned in the Commissioners report down from No. 19 to No. 1 have been scaled or removed; Twenty feet off the Fish Damm wing removed & placed agreeable to the Commissioners' report. A large wing wall is erected on western entrance Rock and Extended in the direction mentioned in our contract, two thirds of the way from thence to the pennsylvania Shore. Mr. Coleback with whom we Contracted to finish this work thought we had Compleated it last Season when we called for a view, but the agents of Information did not come till late in the fall when we attended them and after a Deliberate investigation of the work done the Said Agents of Information to the best of our recollection said there was a great deal of work done and well Done but they Suggested some ammendments to be made to render the Contract intirely compleat, and pointed them out to Mr. Coleback which may soon be done but the Water since that time has not been low enough to Permit working in the River to any advantage

FROM THE FOOT OF WELLS TO TRENTON FALLS

At Johnstons Falls have made Wing Walls Deepened and improved the channel for Low Water

At Slacks Island have removed two Rocks and Improved the channel by Roling other Small Rocks & Stones away

Trenton Falls was finished in the fall of the year 1791, viewed by the Agents the 5th of November and approved to be done agreeable to their Design

THUS SIR we flatter ourselves that we have executed our contract with Dilligence and Dispatch considering the Difficulty of the undertaking and the lateness of the Season of the year 1791, when we entered into the Engagement, the most of our work being Rocks to blow under water, and in many Places the Stream so Rappid that the Stoutest of men could not Stand it without Poles or braces to support them, and notwithstanding the Business has not been done with the approbation of many Persons who think they understand how it ought to be done better than the Commissioners who reported Jany. 30th 1790 or the Present Agents, and have made much Clamour

against us for following their directions which we were Indispinsibly bound to do, yet we find the Watermen begin to take our channels in many Places and approve thereof. We are therefore Persuaded in a Short time the Improvements made by us will be generally acknowledged to be very Beneficial and Usefull and Answer the Intention of the Legislature.

We only Wish a View may be had of the whole work as soon as convenient, that if the Agents of Information may point out to us any further matters to be done Necessary to compleat the Contract we may have an opportunity to do it this fall

With the greatest Esteem & Respect
we have the Honor to be your humble Servants

R. B. (Richard Backhouse)
G. W. (George Wall)

FROM HAZARD'S REGISTER OF PENNSYLVANIA, FOR JANUARY, 1828,
VOL. I, PAGE 57

A TABLE
OF THE SEVERAL RAPIDS OR FALLS IN THE DELAWARE RIVER
BETWEEN EASTON AND THE TIDE

Names of the Falls or Rapids	Distance below the mouth of the Lehigh in miles	Length of each Rapid in feet	Fall of each Rapid in feet and inches	Head of Rapid above tide water at lowest tide in feet and inches
Trenton Falls.....	49	3,500	9' 8"	9' 8"
Gould's Rapids.....	46½	3,000	4' 5"	16' 8"
Scudder's Rift.....	44	2,500	4' 2"	24' 8"
Knowle's Point Rift.....	39½	500	3' 1"	33' 6"
Buck Tail Rift.....	36½	500	1' 5"	36' 5"
Well's Falls.....	35½	4,780	12' 1"	49' 9"
Greenbank Rift.....	32	500	1' 9"	58' 9"
Galloper's Rift.....	31 to 32	1,500	7' 6"	68' 3"
Howell's Rift.....	31 to 32	1,500	7' 6"	68' 3"
Bull's Falls.....	27½	800	4' 5"	72' 2"
Cutsow Rift.....	25½	1,000	3' 10"	85' 4"
Tumbling-dam Falls.....	24 to 25	5,000	11' 1"	89' 1"
Marshall's Island.....	21 to 23½	1,000	11' 5"	100' 7"
Man of War Rift.....	20	500	1' 5"	102' 3"
Stuhl's Falls.....	18	350	1' 8"	107' 2"
Firman's Falls.....	17	700	3' 7"	110' 11"
Nockamixon Falls.....	14	1,700	4' 11"	117' 6"
Linn's Falls.....	12	2,300	7' 4"	127' 5"
Durham Falls.....	9½	350	2' 9"	130' 3"
Gravelly Falls.....	8	1,500	1' 3"	133' 3"
Rocky Falls.....	7	2,000	2' 9"	136' 1"
Ground-hog's Rift.....	6	1,700	1' 11"	138' 1"
Old Sow Rift.....	5	750	2' 4"	145' 7"
Clifford's Rift.....	3½	2,000	5' 1"	150' 10"
Bixler's Rift.....	½	2,000	7' 5"	160' 5"

REMARKS

Trenton Falls is a rapid of nearly uniform descent, with a crooked channel and very rocky.

Gould's Rapids are composed of two rifts half-a-mile apart, with slower and deeper water, or a semi-pool between.

Scudder's Rift is a uniform rapid, quick at the head, having a bottom of stone and gravel.

Knowle's Point Rift is a uniform deep rapid, with a bottom of stone, gravel and rock.

Buck Tail Rift is composed of two rocky reefs, having deep water near the Jersey shore.

Well's Falls has a bottom entirely of rock; loose rocks are scattered across the river, with a crooked channel.

Greenbank Rift has a smooth gravelly bottom and presents very little obstruction.

Galliper's and Howell's Rifts, although nearly a mile apart, are connected together by a current not sufficiently quick to be called a rapid; it forms a semi-pool and is deep and slow enough for steamboats.

Bull's Falls is a straight uniform rapid with a bottom of stone and gravel.

Cutsow Rift is composed of a flat reef of rocks extending across the river.

Tumbling Dam Falls are composed of separate reefs or steps of rocks extending across the river.

Marshall's Island Rapids are principally of three separate rifts with a semi-pool between them as exhibited on the chart, the water between the rifts being sufficient for a steamboat.

Man of War Rift is a short shoal with a bottom of stone and gravel, presenting little obstruction.

Stuhl's Falls is a uniform rapid with a bottom of stones and gravel.

Firman's Falls is a uniform rapid, having a bottom of smooth stones and gravel.

Nockamixon Falls has a rocky bottom and crooked channel among large rocks.

Linn's Falls has two rifts with a semi-pool between sufficient for steamboats, bottom of stone and gravel.

The head of Durham Falls is a short rocky rift on the Jersey side. The whole fall is smooth on the Pennsylvania side.

Gravelly Falls has a current forming a long curve over a bed of small stone and gravel.

Rocky Falls has a short rift at the head; the remainder is a semi-pool among large rocks.

Ground-hog Rift forms a long curved channel over a bottom of stones and gravel.

Old Sow Rift is a uniform rapid with a bottom composed of smooth stones and gravel.

Clifford's Rift is a uniform straight rapid with a bottom composed of stones and gravel.

Bixler's Rift is a uniform straight rapid with a bottom composed of stones and gravel.

In addition to the above named rapids are the following named "shallows" where the water has little depth without sensible fall:

Limestone shallows $32\frac{1}{2}$ miles below the mouth of the Lehigh. These shallows occur a short distance above New Hope and are not discernible except at low water; they have 15" at low water.

Lowreytown shallows (Milford, N. J.) $16\frac{1}{2}$ miles below the mouth of the Lehigh. This shallow is formed by a sand bar in the pool, through which a channel is cut near the Pennsylvania shore.

Whippoorwill shallows $2\frac{1}{2}$ miles below the mouth of the Lehigh. This is a small gravel bar at the head of an island of the same name near the Jersey shore.

In addition to the above there are many shallow spots in the different pools formed by sand bars or rocks lying near the surface.

FERRIES ON THE DELAWARE RIVER NORTH OF PHILADELPHIA COUNTY

The early mode of transportation over streams (not considering fords) was by canoe, by which the traveler, with his saddle-bag, was carried across, while his beast swam behind, and in like manner cattle of all kinds were obliged to ford or swim over. The so-called river ferry followed the canoe and bateau. The ferry boats were scow-shaped, i. e., built with straight or "square" bows, alike at both ends. The bottoms were flat with an upper or false bottom on which the cargo rested. The angle of the ends was about the same as that of the river bank on which the boat landed while loading and unloading. Some boats were large enough to accommodate the largest stage coaches with four or six horses.

We have no data at hand to show the sizes of ferry boats on the Delaware, but they varied in size. "The Crown Inn," page 60, (Reichel 1872), contains the following memorandum for building a ferry-flat, doubtless for the boat used at Bethlehem on the Lehigh: "Length, $31\frac{1}{2}$ feet. Breadth at the head, $7\frac{1}{2}$ feet. Extreme breadth, 9 feet. Aft the head, 7 feet 8 inches. At the stern by a regular sweep from the extreme breadth, 7 feet 2 inches. Depth at highest part of sides, 24 inches. The shear 2 inches, to flare 3 inches. The sides to be sawed 5 inches thick at the bottom edge, and $3\frac{1}{2}$ inches at the top edge. The head and stern posts, 18 inches wide, and 8 inches thick on the front edge. The bottom planks to rabbet on 5 inches. The bottom planks the whole length, and the cross plank the breadth of the flat, the whole two inches thick."

The ferries on the Delaware below tide (that is, below Morrisville, Pa., and Trenton, N. J., where high tide ends) were doubtless propelled with oars and setpoles, and by sails when the wind was favorable, while those above high tide, where there was a current in the river, were equipped with two ropes or hawsers attached to the scow, one at each end, which were attached to a pulley or pulleys operating on hemp rope cables suspended over the river above high water mark. In later years wire rope cables were used. The boats were pointed up stream according to the direction they were desired to travel, and were propelled by the current of the stream impinging against their sides.¹⁴

All ferries where tolls were paid, were required to operate under charters, but it appears that one, Elijah Bond, attempted to defy the law, and began operating his ferry without such license or patent, whereupon, on advice of the Attorney General, the New Jersey Council in 1773, decreed that: "The ferries are a franchise in the Crown, and that no person hath authority to erect a ferry without first obtaining the royal grant. That one Elijah Bond has usurped this prerogative of the Crown by erecting a ferry in this Province at Nottingham, in the county of Burlington, N. J., without any license or grant."

Although there had been earlier mail services in the American colonies, the first regular system in Pennsylvania was inaugurated by William Penn in 1683, when he granted: "to Henry Waldy of Teconay authority to hold one (i. e., a post office and post route) and supply passengers with horses from Philadelphia to New Castle or to the Falls," and for which rates were fixed. By royal patent of February 17, 1691, a new and more advanced system was inaugurated in the American colonies, by the appointment of Thomas Neale, Esq., of England, as its head, commissioned with authority to establish post offices and post-routes, "within the King's Colony and plantations in America." Neale appointed Hon. Andrew Hamilton, Esq., Governor of the Jerseys, as deputy postmaster general. By act of May 20, 1767, "All judges and clerks, with their servants, shall pass and repass and shall be conveyed by all ferrymen of all the several ferries within the Province, without paying ferriage, fee or

¹⁴ The charters required ferry ropes to be above high water, so as not to interfere with rafts or navigation. One cable, however, was placed under water by Henry Quinn at or below Riegelsville. (See Bucks County Historical Society papers, Vol. III, page 527.)

reward for the same." By act of November 27, 1700, the rates of postage were readjusted with the further stipulation that no tolls were to be collected by any ferry from mail carriers or their horses or coaches. These were the beginnings of mail routes and our wonderful post office system, with two cent postage rates, and the rural delivery of mail to the homes of all throughout the United States, and an air mail service established during week of September 23-30, 1914, all with a gross revenue from all sources for the fiscal year ending June 30, 1927, amounted to \$683,121,988.64.

DELAWARE RIVER FERRIES

It has been found impossible, at this late day, to gather complete data of these ancient ferries. Some of them spreading over two centuries, covering the lives of several generations, with many different owners for the same plant, and moreover some of the records consulted are conflicting and sometimes misleading. As a rule the ferries took the names of the parties owning the land, but often of their operators or lessees, and moreover with a different set of owners and operators on opposite sides of the river. We therefore appreciate the fact that the data herein presented are not complete, and that there must be errors and omissions, but it is the best that could be produced after a somewhat careful and painstaking effort. This primitive mode of crossing the Delaware is almost a thing of the past, as four ferries only remain. Two of them are operated privately; all are between Delaware Water Gap and Milford, Pa. They are referred to elsewhere in these notes.

The following data are intended to cover only the known ferries on the Delaware within the County of Bucks and north thereof to the head-waters of the river ending at Hancock, N. Y., and not those plying in the neighborhood of Philadelphia and lower down the river.

(Watson's Annals, Vol. II, page 591, et seq.; Colonial Records, Vol. I, page 498; Statutes at Large of Pennsylvania, Vol. II, page 57; Vol. VII, page 109, and N. J. Archives, Vol. XVIII, page 360.)

FERRIES ON THE DELAWARE RIVER BELOW HEAD OF HIGH TIDE

DUNK'S FERRY—Three miles south of Bristol in Bucks County, at the terminus of the Street road, near the mouth of the Neshaminy Creek, opposite Burlington, N. J. This notable ferry was established by Duncan Williamson, and named for him, "Dunk," being a contraction of his given name. Although there was an earlier ferry there, the first mention we find of it is dated September 30, 1762, and again in 1764. In 1768 it was leased to John Kidd. On December 25, 1776, the day previous to the morning of Washington's attack on the Hessians at Trenton, Gen. John Cadwallader made an attempt to cross the Delaware, probably at Minnick's (later Bloomsdale) Ferry, higher up the river, but owing to floating ice, he was obliged to abandon his design, which was part of Washington's plan to surprise the enemy at Mount Holly, N. J., and to cut off a retreat of the Hessians from Trenton. On the evening at 8 o'clock all troops in and around Bristol marched to Dunk's Ferry, three miles below Bristol, where they succeeded in crossing the next day, and took part in the second battle of Trenton and the battle of Princeton. This ferry is shown on a pen-drawn map of the Delaware made by Reading Howell in 1783.¹⁵ An effort was made in 1851 to revive this ferry, whereupon the legislatures of both states passed an act incorporating the "Beverly & Dunk's Ferry Steamboat Company," which, after promising success, was abandoned.

(New Jersey Archives, Vol. XXIV, pp. 85, 378; Vol. XXVI, page 20; Davis' History of Bucks County, Vol. I, pp. 11, 12, 105, 118; Vol. II, pp. 89, 249; History of Burlington and Mercer Counties, page 513; Colonial Records, Vol. I, pp. 498, 513, 514; Day's Historical Collections of Pennsylvania, page 158.)

BRISTOL-BURLINGTON FERRY—Bristol is the oldest town (and now, 1932, the largest borough) in Bucks County. It was first called Buckingham, then New Buckingham, then New Bristol and since 1714, Bristol. At a meeting of the Provincial Council, June 10, 1697, it was designated as a market town to be laid out

¹⁵ A section of this map copied by Howell in 1792 is in the library of the Bucks County Historical Society. Reading Howell was born in 1743 at Amwell, Hunterdon County, N. J. He was city surveyor of Philadelphia, and died November 26, 1827.

in streets, "at the ferry against Burlington," indicating a ferry there at an earlier day. The ferry crossed the Delaware south of Burlington Island. According to Battle's History of Bucks County (page 389), this ferry was established by Samuel Clift, on his lands, and on his death, April, 1684, his executor, William Biles, leased the ferry house for two years to Richard Hurst. On November 27, 1700, Pennsylvania authorized a ferry "over the Delaware River at or near the Falls to Burlington." This act fixes the rate of tolls, and indicates an earlier ferry there. On December 11, 1704, New Jersey granted a license to Christian Snowden for a ferry from Burlington to Bristol. According to General Davis' History of Bucks County: "A ferry across the Delaware from Bristol to Burlington was first established by the Provincial Council in 1709. A petition was presented by John Sotcher, who owned the land on the Pennsylvania side, on which the landing was to be. In 1724 an act of similar import was passed by the New Jersey assembly, which fixed the rates and prohibited all but licensed ferrymen acting, under a fine of twenty shillings," * * * * "About 1729, Samuel Carey petitioned to be granted the ferry from Burlington to Bristol." General Davis doubtless intended to say that John Sotcher presented his petition in 1709; at any rate, a charter was not granted to him until June 7, 1712, when there was granted: "At the town of New Bristol, with John Sotcher of Pennsbury, Bucks County, appointed to keep the ferry, for a term of seven years."¹⁶ This was confirmed by the Queen's Council, February 20, 1713-14. It also appears that on April 22, 1721, a patent for a ferry from Burlington to Bristol was granted to Thomas Hunloke, by the New Jersey assembly. This ferry continued in operation with various owners, until superseded by a steamboat ferry. The time of starting the first steamboat cannot be definitely fixed, but it appears to have been about 1862. The boats in service successively were the "Sun," "Dayton," "Mercer" and the "Elwood Doran." There was also, for many years, a line of steamboats operating on the river between Philadelphia and Bristol, but it was abandoned some years ago. The legislatures of Pennsylvania and New Jersey have passed bills, approved by the United States War Department, authorizing the building

¹⁶ See "Early History of Bristol," by General Davis, Bucks County Historical Papers, Vol. I, page 548.

of a bridge across the Delaware between Bristol and Burlington. (See Bristol-Burlington Delaware River Bridge, page 181.)

(History of Bucks County, by General Davis, Vol. I, page 95, and Vol. II, page 89; Colonial Records, Vol. I, pp. 513, 514; Statutes at Large of Pennsylvania, Vol. II, pp. 76 and 429.

MINNICK'S FERRY, LATER BLOOMSDALE FERRY—We have no information as to when this ferry was first established, nor when it was legally authorized. It was, however, one of the earliest ferries on the Delaware. It was located on what is now Landreth's seed farm (bought by David Landreth in 1847), one mile above Bristol, Bucks County, crossing the river to Burlington County, N. J. Originally called Minnick's Ferry, named for Christian Minnick, its owner. Mr. Minnick was a member of the Bucks County Committee of Safety, 1774-75-76. He died in 1787. In 1795 the name was changed to Bloomsdale Ferry.

General Davis, in his History of Bucks County (Vol. I, page 105), says that Aaron Burr, after killing Alexander Hamilton, crossed over the Delaware to Bristol by this ferry. According to the *Trenton Federalist* for Monday, July 30, 1804, he crossed by the Lamberton Ferry, at Trenton to Bristol, enroute to Philadelphia. (See Lamberton Ferry, page 135, post). Ex-King Joseph Bonaparte made two attempts to buy Bloomsdale, before purchasing "Point Breeze," at Bordentown, N. J., where he lived from 1815 to 1839.

HOPKINSON'S FERRY—General Davis in his History of Bucks County (Vol. I, page 71) says: "There was a Hopkinson's Ferry on the Delaware, probably in Falls Township, but we cannot vouch for it. Our attention was directed to it by an extract from a letter, 4th month, 6th, 1820, giving an account of an accident that happened to a party of four while crossing the river on the ice, in a carriage, and breaking through. Two were drowned, Esther Collins and Ann Edwards; the other two, Henry Stocker and wife, were saved. The letter was written by the widow of Stocker. This is the only time we have heard of a ferry of that name on the Delaware."

(This ferry may have been named for the Hopkinson family, of Bordentown, of whom conspicuous members were: Judge Francis Hopkinson, signer of the Declaration of Independence and author of the "Battle of the Kegs," and his son, Judge Joseph Hopkinson, author of "Hail Columbia.")

BORDENTOWN FERRY—From Falls Township, Bucks County, to Bordentown, N. J., Scull's map of 1770, indicates this ferry crossing to Bordentown, as Kirkbride's. Later maps show it as Bordentown Ferry; they, of course, refer to different sides of the river. The several acts, by which it was legalized, refer to it as being "at the falls over the Delaware River at the landing of Joseph Kirkbride," indicating, as stated elsewhere in these notes, that "at the falls," "below the falls," etc., are general terms, to which different ferries below the falls may be applied, and not confined to the ferry at Morrisville, which is immediately below the falls. On May 31, 1718, an act authorized a ferry at the falls over Delaware River, at the landing of Joseph Kirkbride, for a term of eleven years. This act fixes the rate of tolls to be charged. On May 10, 1729, this grant was continued for an additional period of eleven years. On the same day the Provincial Council of Pennsylvania confirmed this act as: "An act continuing and establishing a ferry from the landing place of Joseph Kirkbride, over the Delaware River, at the falls." Under dates of February 11 and 18, 1771, Joseph Mitchell advertised: "To be lett, the ferry at Bordentown, with boats thereunto belonging and a good convenient home and garden and two other lots." This doubtless refers to this ferry and rights on the New Jersey side. On May 7, 1778, the home of Col. Joseph Kirkbride ("a most ardent whig, and was actively employed in collecting and forwarding recruits and provisions to the army"), with several outbuildings and his Delaware River ferry at "Bellevue," opposite Bordentown, were burned by the "navy" of General Howe. Bordentown is about six miles south of Trenton. Joseph Kirkbride was a brother-in-law of Langhorn Biles.

(Bucks County Historical Society papers, page 383; Davis' History of Bucks County, Vol. II, page 166; Statutes at Large of Pennsylvania, Vol. III, page 194, Vol. IV, page 128; Colonial Records, Vol. III, page 360; New Jersey Archives, Vol. II, pp. 208, 217, Vol. XXIV, page 46, Vol. XXVII, page 380; History of Burlington and Mercer Counties, pp. 466, 472.)

BILES' ISLAND FERRY—Crossing the Delaware from Falls Township, Bucks County, to Hamilton Township, Mercer County, N. J. Scott's Atlas of Bucks County indicates a ferry-landing at the head of this island, about equidistant between the Morrisville and Bordentown ferries, about three miles from each. Biles' Island containing 300 acres, was purchased by

William Biles for £10 from the Indians in 1680, which was confirmed, by a deed to his son bearing date March 19, 1729. Like all other ferries below the head of tide, this one was doubtless propelled with oars and set-poles, and when the wind was favorable by sails, and not by a cable system suspended over the river.

MORRISVILLE-TRENTON FERRIES

There were three ferries on the Delaware between what is now Morrisville, Bucks County, Pennsylvania, and Trenton, New Jersey. The first to be established was the one crossing at the foot of Ferry Street, immediately south of the present Lincoln Highway bridge, and known at various times as the "Trenton Ferry," the "Old Ferry," the "Middle Ferry" and the "Upper Ferry." The second one to be opened was the Bond Ferry at Lambertton, about one mile south of the Trenton Ferry, and the third the "Beatty" or "Calhoun Street Ferry," above the falls, and about one mile above the Trenton Ferry.

On June 10, 1697, the Provincial Council of Pennsylvania granted to Joseph Chorley of Falls Township, the right to operate a ferry from the Pennsylvania shore, which Warren S. Ely says was for the ferry between Morrisville and Trenton, but which General Davis, in his History of Bucks County, believes to have been at Bordentown.

TRENTON FERRY AT FERRY STREET—It has been found difficult, from information at hand, to differentiate between the Trenton ferries and those immediately south thereof, as the terms Falls, Falls Township, Delaware Falls, Falls of Delaware and Trenton Falls are early names often applied to the general locality. General Davis says the Trenton Ferry at Ferry Street was established by act of the Pennsylvania Assembly, May 31, 1718, "after there had been a ferry there three-quarters of a century." This may possibly be the ferry referred to by Captain Richard C. Holcomb as "A ferry across the Delaware at the Falls which was licensed by the Court at Upland as early as 1675."

On February 7, 1726, the New Jersey Assembly granted the exclusive use of the eastern or New Jersey shore, for a limited time, for ferry purposes to James Trent, extending for two miles above and two miles below the falls. This grant, therefore, included the limits of the three ferries. In 1745 Thomas Hooten

is referred to as the keeper of this lower ferry. On January 31, 1753, Robert Lettis Hooper (Sr.) purchased a tract, known as Trent Mills, with a ferry, from Hon. George Thomas of the Island of Antigua, who had bought it from William and Anthony Morris, of Philadelphia. On January 17, 1765, Hooper advertised his gristmill and certain other property for sale, together with his "Ferry known by the name of Trenton Ferry, with a patent for same and all boats, etc., for carrying on the business." On May 28, June 4 and July 3, 1770, he again advertised for sale at public vendue, "The noted patent ferry, called Trenton Ferry, in the County of Burlington, with boats and 442 acres of land with improvements, extending down the river including the fishery called Lamberton, now in the tenure of William Richards at the head of tide-way, from whence shallops constantly ply to and fro from Philadelphia." Shortly thereafter it was bought by Daniel W. Coxe.

From the following advertisement, appearing in the *Pennsylvania Gazette*, it appears that the Coxes owned two ferries on the Delaware, one described as being twelve miles from Trenton and thirty miles by road from Philadelphia. This must have been in the neighborhood of what is now Moore's station, perhaps reaching as far down as Titusville, Hopewell Township, Mercer County, N. J., where Dr. Daniel Coxe, on March 30, 1688, bought a large tract from the Indians. The other one, probably the Ferry Street Ferry at Trenton, also about thirty miles from Philadelphia.

On April 1, 1761, the executors of Daniel Coxe (the fourth) advertised to sell his plantation called "Bellemont," with 1,320 acres of land, having $1\frac{1}{2}$ miles of frontage on the Delaware, "with a patent for a ferry over to the Pennsylvania shore." And again on December 10, 1761, they offered, what is doubtless subdivisions of the same tract, in two parcels, one called "Bellemont," whereon he had resided, with 640 acres of land and a frontage on the Delaware of at least a mile. The other adjoining on the south, separated from it by a creek, containing 507 acres of land, with a river frontage of near a mile, "and is a patent for a ferry, to which there is a road opening to Pennington, and the land on the Pennsylvania shore is purchased for a ferry." They are described as being 12 miles from Trenton and 30 miles, by a good wagon road, from Philadelphia.

On September 26, 1770, Daniel Coxe (the fifth) advertised to be let, the Trenton Ferry and Tavern, "on the Delaware, near Trenton, 30 miles from Philadelphia, doubtless the Ferry Street Ferry. On January 3, 1776, he advertises for a tenant to succeed Rensselaer Williams at the lower ferry, and on May 6, 1776, Thomas Janney advertises the fact that he was in possession of the ferry, "where Rensselaer Williams formerly lived." On July 10, 1776, Thomas Harvey, operating the new ferry on the Pennsylvania side, entered into a controversy with Thomas Janney, in re rates of tolls and other competitive conditions. From this we learn that the Delaware, at that time, was 330 feet wider at the upper ferry than at the lower one, and that the distance between them was about one mile.

On December 27, 1776, the day following the Battle of Trenton, the British soldiers, out of revenge, burned the "elegant home" of Daniel Coxe (the fifth) at the Trenton Ferry. This was an unexplainable act, as he was known to have been an objectionable Tory, whose property was later seized by the Commissioner of Forfeited Estates, and sold at public outcry on November 10, 1779.¹⁷

On William S. Yard's map of Trenton, dated 1776, this ferry on the Pennsylvania side is noted as "Blazing Star Ferry." (Facing page 92 in Stryker's *Battles of Trenton and Princeton*.)

In 1772 Patrick Colvin bought a large tract of land, lying on the Delaware, with a ferry, on the Pennsylvania side of the river. The settlement was then called Colvin's Ferry. It was here that Washington and his army crossed into Pennsylvania December 8, 1776, and effected their escape from the pursuing British. Colvin disposed of his property with the ferry in 1792, but for twenty years from 1772 to 1792, the settlement was known as Colvin's Ferry, and as such will go down in history as having been in his possession during the entire period of the Revolution. The name was not changed to Morrisville until after Robert Morris, the financier of the Revolution, bought property and settled there. Morrisville was organized and chartered as a borough in 1804.

The first through stage coaches between Philadelphia and New York, were set up by John Butler in 1756. The stages ran up and down on the Pennsylvania side, crossing at the Tren-

¹⁷ For Coxe Family, see *New Jersey Archives*, Vol. X, page 226.

ton Ferry. This service continued until the river bridge was opened for travel January 30, 1806.

(Davis' History of Bucks County, Vol. I, page 71, Vol. II, pp. 163 to 169, 247, 253; Hall's History of Trenton Presbyterian Church, page 113; History of Burlington and Mercer Counties, pp. 666, 816; New Jersey Archives, Second Series, Vol. I, pp. 8, 96, 138, 154, 246, Vol. III, pp. 111, 112; Vol. XII, pp. 245, 697, Vol. XX, pp. 365, 492, 646, Vol. XXIV, page 471, and Vol. XXVII, pp. 159, 274, 534; Louise Hewitt's Historic Trenton; Colonial Records of Pennsylvania, Vol. I, page 514.)

LAMBERTON FERRY—Located below Trenton Falls, at Lamberton, now part of the city of Trenton, about two miles south of the present Lincoln highway bridge. The New Jersey landing was near the site of the present Pennsylvania Railroad Company's river bridge. The Pennsylvania end was owned by John Thornton. In 1776 this ferry was in possession of Thomas Harvey. This ferry is evidently a revival or a continuance of the Bond Ferry, referred to on page 126 ante, which in June, 1773, Elijah Bond was operating without a license. It was doubtless by this ferry that the American troops under Gen. John Cadwallader attempted to cross the Delaware on Christmas night of 1776, to form a junction with Washington in his attack upon the Hessians, as the crossing at Ferry Street was in possession of Daniel Coxe, a well-known British sympathizer. In 1776 this ferry was taken over by Major William Trent, a son of Colonel William Trent, who later advertised the ferry together with 600 or 700 acres of land for sale.¹⁸ At that time it was designated by the Quartermaster's department of New Jersey as a Continental Ferry, where men in active army service might pass at reduced rates of ferriage. On September 25, 1780, the Continental Ferry was transferred to the crossing at Ferry Street, but on October 8, 1780, it was restored to the Lamberton Ferry, but on May 30, 1781, Continental Ferry was again moved back to Ferry Street.

It was at the Lamberton Ferry that Aaron Burr crossed over into Pennsylvania after killing Alexander Hamilton in a duel at Weehawken, N. J., on Wednesday, July 11, 1804, dying the following day, July 12, in the city of New York. The *Trenton Federalist*, under date of July 30, 1804, has this to say concerning the movements of Aaron Burr:

¹⁸ New Jersey Gazette, September 16, 1778; New Jersey Archives, second series, Vol. II, page 429, and History of Trenton, Chapter V, by William J. Backes, page 266.

"In the early part of last week, the man who has covered our country with mourning, Col. Aaron Burr, passed through the state of New Jersey, on his way to Philadelphia, where, we are informed, he had the hardihood to make a public appearance by walking in the open streets in the face of day. From Amboy he was carried by some friend to Cranberry, and thence conveyed in a light-waggon, crossing the Delaware at Lamberton ferry to Bristol in Pennsylvania."

As the Trenton Delaware River Bridge was opened for travel January 30, 1806, it is to be presumed that all ferries at Trenton stopped operating about that time.

TRENTON FERRY AT CALHOUN STREET—The upper Trenton Ferry, crossing the Delaware between Morrisville, Bucks County, to a point just above the Calhoun Street bridge, often referred to as the Beatty Ferry. Its location was above Trenton Falls, and therefore the first ferry on the river above high tide. This ferry was doubtless established by George Beatty during the early days of the Revolution. General Stryker refers to the ferry boat from Beatty's Ferry having been taken up the river and used by Washington in crossing the Delaware, Christmas night of 1776. General Stryker also says that a few of the officers and men returned from the battle of Trenton by the Beatty ferry and some by the lower Trenton and Yardley ferries. A notice in the *Trenton Gazette*, August 14, 1782, signed John Burrows and George Beatty, refers to it as the "New Trenton Ferry." On Howell's map of 1792, the property on the New Jersey side is marked as belonging to Hooper. This is evidently the property, then one mile above Trenton, now about where West State Street and Prospect Street meet, called "Belville," formerly the home of Sir John Sinclair, then of General Alexander (Lord Stirling), then of Col. Robert Lettis Hooper, Jr., where he died July 30, 1797; his wife, the widow of Sir Robert Erskine, having also passed away there in 1796.¹⁹ Later the property came into possession of John Rutherford, who in 1802 advertised his tavern and ferry-house to be let. In June, 1802, Mahlon Reed announced that he was attending the Rutherford Ferry, where the public mail carriages and other stages crossed daily. Robert

¹⁹ For Col. Robert Lettis Hooper, Jr., see *Pennsylvania Magazine of History*, Vol. XXXVI, pp. 60, et seq.; *Hall's History of Trenton Presbyterian Church*, pp. 113, 114; *The Homes of George Taylor*, Bucks County Historical Society papers, Vol. V, pp. 113, et seq. Robert Lettis Hooper, Sr., died April 30, 1785.

Perkins was then in charge of the Pennsylvania side. In August, 1806, John Rutherford tried to sell his ferry together with two ferry-houses. In 1822 he again tried to sell the ferry on both sides of the river, but it remained in his possession certainly until 1845. The bridge which succeeded this ferry was opened for travel in 1860. (For Calhoun Street bridge see page 169.)

(New Jersey Archives, Vol. XX, pp. 273, 366, 568; Davis' History of Bucks County, Vol. II, page 166, and Bucks County Historical Society papers, Vol. II, page 320. History of Trenton, Chapter V, page 269, by William J. Backes.)

YARDLEY'S FERRY—From Yardleyville, now Yardley, Bucks County, Pa., to Greensburg, now Wilburtha, Mercer County, N. J. Upon the death of Thomas Yardley in 1683, his son Thomas established a ferry at this place, which was confirmed to him by act of the Pennsylvania assembly, May 22, 1722, to be kept by him for a term of fourteen years, "In Makefield Township, Bucks County, upon lands of Thomas Yardley." Makefield Township was divided in 1853 into Lower and Upper Makefield. This ferry is in Lower Makefield. The *Pennsylvania Gazette* of July 24-31, 1732, mentions one Warren Barr as the person who "formerly kept the ferry above Delaware Falls on the Jersey side." On March 1, 1729, there was advertised, on the New Jersey side: "A house and ferry to be let on Delaware above the Falls, commonly called Heath's Ferry. Enquire of Thomas Gould or Francis Rowes." This refers to the Yardley Ferry. There are two surveys of this ferry on file in the Surveyor General's office at Burlington, one made November, 1730, recorded to James Gould; the other of March, 1736, noting the New Jersey side as Gould's Ferry and the Pennsylvania side as "Yeadley's." The New Jersey Archives, under date January 3, 1765, refer to this ferry as Howell's Ferry, late Yardley's. On Scull's map of 1770 it is marked Yardley's. General Davis says (Vol. I, page 88) that this ferry was first built half-a-mile below the river bridge, the boats landing opposite on the farm of Jolly Longshore, that one Howell kept the ferry on the New Jersey side, by reason of which it was often called Howell's Ferry.²⁰ General Stryker, in his "Battles of Trenton and Princeton," frequently refers to this ferry on the New Jersey side as Johnson's Ferry (pp. 109-110-117-145-207). On some maps it is

²⁰ See Vol. I, page 16, of the Bucks County Historical Society papers.

marked John's Ferry. Later the ferry was moved up the river to the site of the bridge, where the "White Swan" tavern was built. The settlement on the New Jersey side was called Greensburg, but was changed to Wilburtha in 1882, when the Pennsylvania Railroad Company changed the name of its station. In like manner Yardleyville was changed to Yardley, when the Bound Brook Division of the Philadelphia & Reading Railroad was opened and the town incorporated into a borough in 1893. The ferry was discontinued in 1835, when the river bridge was opened for travel. (For Yardley bridge, see 170.)

(Battles' History of Bucks County, page 441; Colonial Records of Pennsylvania, Vol. III, page 166; Pennsylvania Archives, First Series, Vol. V, pp. 375, 441; Statutes at Large of Pennsylvania, Vol. III, page 318; New Jersey Archives, Vol. XI, page 169, and Vol. XXIV, page 467; Bucks County Historical Society, Vol. II, page 16.)

McKONKEY'S FERRY—Although the McKonkey family owned the ferry at Washington Crossing but three years, it will always go down in history bearing their family name. The Pennsylvania end was located immediately above the present river bridge, in Upper Makefield Township, Bucks County, on a tract of land taken up in 1684 by Henry Baker, who established the first ferry there, giving the place the name of Baker's Ferry, by which it was known for nearly a century. Henry Baker bequeathed that part of his real estate containing the ferry to his son Samuel, whose executors advertised the plantation of 600 acres, with the ferry, to be sold at public vendue on March 10, 1763. It was evidently bought by his son, Samuel Baker, Jr., whose executors, in turn, conveyed the property by deed bearing date, December 5, 1774, to Samuel McKonkey. The name was then changed to McKonkey's Ferry, which has been made memorable in history as the place where General Washington and his brave men crossed the Delaware on Christmas night of 1776. Boats for the crossing were gathered from all along the river, assembled and hid back of Malta Island (later called Smith's Island), about one mile below New Hope. While these boats included those of other ferries, history records that the crossing was made mostly on Durham boats. Boats of the Durham type could not well have been made part of the ferry system, for, in fact, one or more ferry boats could not have accommodated so large an army with its artillery and

other equipment, even if more than one trip had been made.²¹ This shows that while the crossing was made at the ferry, it was not wholly by the ferry. All paintings and engravings of the crossing show General Washington himself in a Durham boat struggling with the ice.

The Wayne County Historical Society, in a publication by its secretary, Edwin B. Callaway, records: "Ebenezer Taylor, one of the early settlers of Damascus Township, had the distinction of plying his way up the Delaware River in the Durham boat used by George Washington to make his famous and historic trip across the Delaware during the Revolutionary War."

On March 21, 1777, Samuel McKonkey conveyed the ferry with 146 acres of land to Benjamin Taylor. The name of the place was then changed to Taylor's Ferry. It remained in the Taylor family for many years, and when the post office was established there, February 11, 1829, it was called Taylorsville. Hon. Samuel F. Gwinner in a paper read before the Bucks County Historical Society (Vol. II, page 325) states that this ferry was at one time known as Tomlinson's Ferry, probably its New Jersey name.

On July 25, 1917, the Pennsylvania Legislature passed an act creating the Washington Crossing Park Commission, authorized to improve the highways, preserve its old landmarks and lay out a memorial park. On January 28, 1919, the name of the village and post office were changed to that of Washington Crossing. In 1895 the Bucks County Historical Society erected on the Pennsylvania side, a granite monument to mark the place of crossing. In 1927 the Commission moved this monument farther up the river, having by survey, found more nearly the exact place of Washington's embarkment. On the same day (October 15, 1895) the New Jersey Society Sons of the Cincinnati unveiled a monument with a bronze tablet on the New Jersey side, to mark the place of his landing.

²¹ The army crossing at McKonkey's Ferry, in addition to the officers, with their horses, consisted of 2,400 selected soldiers with their rifles, 20 cannon and howitzers. The embarkment began on Christmas Day at 8 P. M., and by 3 A. M. of the 26th the last trip with the artillery was landed on the New Jersey side. It took until 8 A. M. to make the march of nine miles to the British garrison at Trenton, twelve hours from the time of the first embarkment. On their return trip, by the same ferry on the same day, they brought back with them as prisoners 1,000 of the 1,200 Hessians, together with their rifles, six brass field pieces, ammunition, stores and eight flags.

There is very little data at hand, to show the different owners of land on the New Jersey side. In early years it was known as Eight Mile Ferry and then later as Bernardsville Ferry.²² The location was in the present township of Hopewell, Mercer County. On May 12, 1768, Henry Margerum advertised a plantation of 100 acres of land "anciently known as Parmer's Ferry, in Hopewell Township, eight miles from Trenton." This distance corresponds with that between Trenton and Washington Crossing. General Davis, in his *History of Bucks County*, says this ferry was for years known as Vessel's Ferry; he must refer to the New Jersey side. On a map accompanying the *Pennsylvania Archives* (Vol. I, Third Series), published about 1791, this ferry is laid down, on the New Jersey side, as Harvey's Ferry.

In 1914 the State of New Jersey created the Washington Crossing Park Commission, which has laid out a park and roads, marked the old buildings and otherwise improved conditions on that side of the river. There is a movement on foot to get an appropriation from the Congress of the United States for replacing the present bridge with an elaborate memorial bridge. The ferry was shut down when the bridge was opened for travel in 1834. (For Washington Crossing bridge, see page 171.)

(Bucks County Historical Society papers, Vol. I, page 465, and Vol. II, page 316; *Historical Collections of New Jersey*, page 262; *New Jersey Archives*, Vol. XXIV, page 113, and Vol. XXVI, page 333.)

BEAUMONT'S FERRY—(Marked Blue-mounts on some maps). Located at what is now Brownsburg, formerly Pebbletown, a little less than one mile north of Knowles Creek in Upper Makefield Township, Bucks County, midway between New Hope and Washington Crossing, about $3\frac{3}{4}$ miles from each place. This ferry and the roads leading to it from Wrightstown and Washington's headquarters at the Keith House, played an important part in Washington's Trenton and other New Jersey campaigns.²³ The Beaumont family owned about 600 acres

²² *Historical Collections of New Jersey*, by Barber & Howe, page 261.

²³ Washington's headquarters at the Keith House was about two miles west from the Delaware, and those of his trusty generals were nearby, all near the southern base of Jericho Hill. Knowles Creek (sometimes erroneously called Baker's Creek), south of Jericho Mountain, is the northern boundary of Penn's first purchase of land from the Indians in Bucks County, made July 15, 1682, by William Markham, before the arrival of William Penn. A marker has been set up on the south side of this creek, setting forth this fact. Knowles Eddy, or Knowles Cove, is at the mouth of this creek.

of land at that place, extending from the Solebury Township line at Bowman's Hill to below Brownsburg. In 1797 John Beaumont sold 102 acres, including the ferry, to Samuel Opdyke, who also kept the hotel at the ferry. It then became known as Opdyke's Ferry, and is so indicated on a map of New Hope, dated 1798, reproduced by General Davis in his *History of Bucks County*. The settlement bore the name of Pebbletown down to 1827, when the property with its hotel and ferry came in possession of Stacy Brown, who was instrumental in having a post office established there, called Brownsburg, in his honor, and by which name it has since been known. The New Jersey ferry landing was in Hopewell Township, Mercer County, at or near where Moore station of the Pennsylvania Railroad now stands. In his report to President Wharton, on the fords of the Delaware, Benedict Arnold refers to this ferry as Petit's. As shown on page 133, ante, the Daniel Coxe estate advertised for sale, a tract of land in Hopewell Township, of 1,320 acres in 1761, and again in 1770, with a river frontage of one and one-half miles, to which there was attached a ferry patent, stating that they had an option on land in Pennsylvania for a ferry landing; this was doubtless prior to the erection of a ferry there. The New Jersey Archives refer to Horn's Ferry as being near Coryell's, which may refer to this ferry on the New Jersey side.

(Buck's *History of Bucks County*, pp. 35, 36, and Appendix of same, page 18; Battle's *History of Bucks County*, page 443; Davis' *History of Bucks County*, Vol. I, pp. 294, 466; New Jersey Archives, Vol. XXV, page 202.)

CORYELL'S FERRY—This ferry operated on the Delaware between New Hope, Bucks County, and Lambertville, N. J. Frequent mention is made of this ferry as a place of crossing the river during Washington's campaign on the Delaware. As its history and the settlements, on both sides of the river, together with the property owners, have been the subject of numerous papers by historians, it seems unnecessary to repeat them in this brief notice. I beg leave, however, to call special attention to the papers by Capt. Richard C. Holcomb, published in Volume V of the *Bucks County Historical Society*; and the brochures by Miss Hannah Coryell Anderson, entitled "*General Washington at Coryell's Ferry*," and by Miss Margaret W. Ely, entitled "*Early History of New Hope*."

This, like all ferries on the Delaware, took the names of its respective owners from time to time, but it is best known in history as Coryell's Ferry, by reason of bearing that name during our war for independence. John Wells bought land on the Pennsylvania side, June 26, 1717, and is said to have established a ferry service there about that time. The ferry was located a little below the site of the river bridge, where the Ferry Tavern (since 1827 the Logan House) stands, and about half-a-mile above the head of Wells Falls, which are 4,780 feet long, and were named for him. The legal right to operate this ferry was first vested in John Wells by act of the Pennsylvania assembly, May 22, 1722, for "a ferry to be erected and settled in Solebury in the County of Bucks, over the Delaware River to New Jersey." This act fixes the rate of tolls to be charged. His license was for a term of seven years, during which time no other ferry could operate within a limit of two miles above and two miles below. "Except Thomas Canby, his heirs, executors, administrators and assigns, for the use of themselves and their mill." It appears that John Wells was favored with a continuance of his license, during the pleasure of the Governor, and that on February 12, 1733, a renewal was granted him, with certain restrictions, for an additional period of seven years. On October 29, 1745, Benjamin Canby succeeded John Wells as proprietor of the ferry, and on the death of Canby in 1748, it came into possession of George Ely, of Amwell, N. J., who had married the widow of Emanuel Coryell. Ely had the distinction of having operated the ferry and taverns on both sides of the river. On January 2, 1751, David Kinsey, who had married the widow of Benjamin Canby, supplanted George Ely. After the death of Mrs. Kinsey (widow of Benjamin Canby) in 1760, the ferry property was sold and came into possession of John Coryell. John Coryell became financially embarrassed, and in 1782 the ferry was sold by Samuel Dean, Sheriff of Bucks County, to John Beaumont, who owned it but a few years. A fire in 1790 caused the name on the Pennsylvania side to be called New Hope. In 1805 a post office was established there, and in 1837 it was incorporated into a borough.

On the New Jersey side, Emanuel Coryell, on April 30, 1726, applied for a license for John Coates to keep a ferry on that side, opposite Wells' Ferry. In 1728 he sold out to John Purcell,

who, in turn, in 1732, sold it to Emanuel Coryell, whose legal right was confirmed to him, January 7, 1733. Emanuel died in 1748. In 1764 John Coryell, son of Emanuel, obtained a license for the New Jersey side. On November 1, 1766, the ferry, with certain lands in New Jersey, then in possession of Robert Grant, late the property of Abraham Coryell, was seized, as the property of George Ely, and sold by the sheriff of Hunterdon County. On the death of John Coryell, the property was adjudged to his son, Abraham Coryell, who advertised for sale: "The noted ferry on the Delaware on the Jersey shore, called Coryell's Ferry, with 75 acres of land," at public vendue on March 15, 1779. The first stages over the Old York Road crossed at this ferry, September 26, 1769. As shown by an advertisement in the *Pennsylvania Chronicle*, the New Jersey shore, in 1770, was in possession of Donald McDonald.

The town name of Coryell's Ferry on the New Jersey side was changed to that of Lambertville in 1814, when the Hon. John Lambert, United States Senator, for whom it was named, secured a post office there. The town was incorporated in 1849. The ferry stopped operating in 1814, when the river bridge was opened for travel. (For New Hope-Lambertville bridge, see page 171.)

(History of Hunterdon and Somerset Counties, pp. 266, 270; New Jersey Archives, Second Series, Vol. III, page 90, Vol. XXV, page 225; Statutes at Large of Pennsylvania, Vol. III, page 316, and Pennsylvania Archives, Third Series, Vol. I, page 27.)

CENTRE BRIDGE FERRY—So named because it was midway between New Hope and Lumberville, about three miles and a half from each place. Crossing from Centre Bridge, Bucks County, Pa., to what was later Stockton, Hunterdon County, N. J. The town was first called Stockton in 1852 when the post office was first established there. It was first called Reading's Ferry, soon after 1700, for Col. John Reading, a Jerseyman, who owned the ferry and lands on the New Jersey side. In 1711 he was instrumental in having the Old York Road laid out, beginning at his ferry, at what is now Centre Bridge, on lands of Barzillian Foster, where the terminus of the road was located for several years, and then changed to Coryell's Ferry. After his death in 1717, it appears that his ferry operations were suspended, and the public road allowed to become overgrown

with weeds. In or about 1731, Capt. Daniel Howell, son-in-law of Col. John Reading, reopened the ferry, but the terminus of the Old York Road remained at Coryell's Ferry. On Scull's map of 1770, it is indicated as Howell's Ferry, while on the map of 1776-77, accompanying Marshall's *Life of Washington*, it is marked Robinson's Ferry. It is also marked Robinson's Ferry on the Pennsylvania side and Hart's Ferry on the New Jersey side on "The American Atlas," published in 1796 by John Reed of New York. Later the land on the Pennsylvania side became the property of William Mitchell, from whom the place took the name of Mitchell's Ferry, and it is so marked on a map of 1798, reproduced by General Davis in his *History of Bucks County*, Vol. I, page 294. The lands and ferry interests, on both sides of the river, were conveyed to the newly chartered bridge company, viz.: that on the Pennsylvania side by William Mitchell on March 29, 1813, and that on the New Jersey side by Joseph Howell and Susanna, his wife, on July 16, 1813.

The ferry was abandoned after the bridge was opened for travel in 1814. (For Center Bridge, see page 172.)

(See papers by Captain Holcomb, Bucks County Historical Society, Vol. V, pp. 584 and 650; *History of Hunterdon and Somerset Counties*, pp. 266, 270.)

LUMBERTON FERRY—From Lumberton, Solebury township, Bucks County, Pa., later called "Hard Times," and so marked on the survey of the Delaware Division Canal in 1828, to Delaware township, Hunterdon County, N. J., at a landing about three-fourths of a mile south of Bull's Island, now Raven Rock, railroad station. In early days the surrounding lands on the Pennsylvania side of the river were owned by Stophel Rose, which subsequently came in possession of his son, John Rose. The ferry was then known as Rose's Ferry. William Skelton purchased from John Rose, that part of the tract containing the ferry, which he sold to John Kugler, August 13, 1771, reserving a right for a landing. John Kugler continued to reside there until 1782. He and his wife Susanna were attainted of treason for having "harbored spies for the British army, concealing prisoners and aiding in their escape to the enemy." They were both on April 6, 1780, committed to the Bucks County jail at Newtown, but on June 10, 1780, were released on bail of £15,000 each, and not permitted to operate the ferry, by means of which

they had carried on a traitorous correspondence. This led John Kugler to sell the property in 1782 to George Warne. After Warne's death in 1792 his executors sold the property to Joseph Hart for £1,300. It then became known as Hart's Ferry, and is so indicated on the map of 1776-77 accompanying Marshall's *Life of Washington*. On the map accompanying Reading Howell's survey of the Delaware River in 1783, the Pennsylvania side is noted as Warne's Ferry and the New Jersey side as Thorne's Ferry. On a map published in 1811 the settlement on the New Jersey side is called Saxtonville, and the ferry Saxton's Ferry. Reuben Thomas and Jacob Painter became the owners in April, 1796. It then became known as Painter's Ferry. Painter died in July, 1805, after which his property was sold to Joseph Kugler. In 1816 it was bought by John Gillingham. This ferry was discontinued after the toll bridge was opened in 1835. Lumberville, one mile farther up the river, was known as Wall's Landing as late as 1814, when the name was changed to Lumberville. We have no record of a ferry at that landing.

(Davis' *History of Bucks County*, Vol. I, page 287, and William J. Buck's *History of Bucks County*, pp. 60, 61, 70.)

POINT PLEASANT FERRY—From Point Pleasant, Bucks County, Pa., to what is now Byram station (until 1882 called Point Pleasant) on the Pennsylvania Railroad in Kingwood Township, N. J. This ferry was granted to Matthew Hughes on August 23, 1739. It was located immediately on line of his property and that of Enoch Pearson, which resulted in a complaint laid before the Board of Property for Pennsylvania, which decided that Hughes should pay Pearson at the rate of forty shillings per acre for land encroached upon.

In 1740 Pearson conveyed his land with ferry to Daniel Dawson, who, by will, in 1744, devised it to his son, Daniel Dawson, Jr., and his daughter, Mary, wife of John Thompson. Thompson became the sole proprietor in 1747, and in 1748 he conveyed it to John White. White conveyed seven-eighths interest, on the same day, to seven of his neighbors, and these eight men formed the Cave Bank Fishery Company. This has always been one of the best shad fisheries on the river above tide. This ferry is shown on Reading Howell's map as Blacks. It is also indicated on his pen-drawn map of the survey of the

Delaware River in 1783, but does not appear on either of the Scull maps. Black gave the name of Lower Blacks Eddy to that village, which was a popular place for rafts to tie up for the night. A post office was granted in 1821, called Lower Blacks Eddy, on the south side of the Tohickon Creek, but when removed to the north side in 1828, Joseph Hough was appointed postmaster and the name was changed to Point Pleasant. In 1832 John F. Youngken was postmaster. The ferry continued in operation until the bridge was opened for travel in 1835. (For Point Pleasant bridge, see page 174.)

("The Early History of Point Pleasant," by Warren S. Ely, to be published in Vol. VI, of the Bucks County Historical Society papers. Pennsylvania Archives, Third Series, Vol. I, page 107.)

FRENCHTOWN FERRY—This is an ancient ferry and may have been established as early as 1699, when the London Land Company made its first purchase of land in Tinicum Township, covering five miles of river front. The first recorded account of it, now at hand, dates back to 1741, when it is noted as London Ferry, located on the Pennsylvania shore, below the present river bridge, in Tinicum Township, Bucks County, Pa., between the present towns of Uhlerstown and Erwinna, and crossing thence over to Frenchtown, N. J. It is also noted on Scull's maps of 1759 and 1770 as London Ferry. On the latter map the New Jersey settlement is noted as Sunbeam. On December 10, 1761, the New Jersey side was in possession of David Newberry. On October 18, 1764, it is referred to as Mechlenburgh Ferry, kept on the Pennsylvania side by John Tinbrook, and on the New Jersey side by Daniel Pigmore. On Reading Howell's map of 1792, the present borough of Frenchtown is marked Alexandria. On April 1, 1768, William Pidgeon (a lawyer of Nottingham, Burlington County, N. J.) bought two tracts of land in Tinicum Township, aggregating 529 acres, at sheriff's sale as the property of Richard Stevens, which he advertised for sale, saying that the ferry was on one of the tracts, and in possession of John Tinbrook. Col. Arthur Erwin became the purchaser of both tracts, deed dated March 16, 1769, and no doubt the ferry was known as Erwin Ferry from that time until the property passed out of the Erwin family. (See Deed Book, Vol. 13, page 37.) The earliest mention of a ferry on the New Jersey side is in the proceedings of the Provincial Council,

of that state, under date of June 7, 1753, when there was granted: "A patent to Mrs. Ann Pidgeon for a ferry over the Delaware River, at a certain place or creek's mouth, falling into the said river, and known by the Indian name of Nickisakawick, being on the lands of said Ann Pidgeon, situate in Kingwood, County of Hunterdon, and so along the shore for half-a-mile above and half-a-mile below the said creek's mouth." The History of Hunterdon County, page 428, in referring to a document, dated August 24, 1759, refers to the New Jersey side as Calvin's Ferry. The New Jersey Archives (Second series, Vol. I, page 475) says that General Howe crossed Sherod's Ferry (at Frenchtown) on Thursday morning, October 2, 1777, after the Battle of Brandywine. On Erskine's map, on file in the New York Historical Society, used by the Continental army, 1778-80, this crossing is noted as Sherrerd's Ferry. In 1808 it was called Prevost's Ferry. Abandoned in 1844, when the river bridge was opened for travel. (For Frenchtown bridge, see page 175.)

(New Jersey Archives, Vol. XVI, page 429; Vol. XX, page 646; Vol. XXIV, page 438, and Vol. XXVI, page 135. For William Pidgeon see Hall's History of Trenton Presbyterian Church, page 246.)

MILFORD, N. J., FERRY—From Upper Blacks Eddy, Bucks County, Pa., to Milford, Hunterdon County, N. J. Upper Blacks Eddy is now in Bridgeton Township, erected in 1890 out of part of Nockamixon Township, Bucks County. There is no reliable data at hand to show when this ferry was established. A ford was used for crossing before the ferry was built. The settlement on the Pennsylvania side, called Upper Blacks Eddy, was a most desirable place for raftmen to tie up for the night. This is the longest eddy on the river, and was usually crowded with rafts during the spring flood rafting season. A post office was established there in 1830.

The earliest record at hand of the New Jersey side is a copy of a survey, about 1757, by Elisha Emley, which indicates a sawmill on the Wissahawken Creek, about 200 feet from its mouth at the Delaware. Later a gristmill was built farther up the creek, which, in 1769, when the property of Col. John Reid, was destroyed by fire. This gave the settlement the name of Burnt Mills.

In 1798 Col. Thomas Lowrey bought 333 acres of land in and around what is now the town of Milford, including the

site of the burnt mill, and during the following years 1799-1800, erected a gristmill by the riverside, to which shortly thereafter he added a sawmill. The place was then called Lowreytown, and the ferry Lowreytown Ferry. In 1803 the name was permanently changed to Milford, and the ferry to Milford Ferry. There is a tradition that, although the ferry was established prior to 1803, the town was named for the ferry, a combination of the words Mill and Ford. When the river bridge was opened for travel in 1842, the ferry was shut down. (For Milford bridge, see page 175.)

(History of Hunterdon County, pp. 427, 429, and History of the Lowrey Family in The Jerseyman, pp. 21 to 26.)

MONROE FERRY—From Monroe (later Lehnenburg), Durham Township, Bucks County, Pa., to Holland Township, Hunterdon County, N. J. Some historians claim that this ferry was established when the charcoal blast furnace was started at the village of Durham in 1727. This is certainly wrong; there is no documentary or other evidence to warrant that assumption, and moreover the road from the furnace to Monroe was not indicated on the Durham Furnace map of 1773. What is now the village of Monroe, on the Pennsylvania side, was first developed by Thomas Pursell, when he bought Tracts Nos. 12 and 13 of the Durham Furnace lands. Tract No. 13, on which the ferry was located, was bought by him, January 1, 1786, and the river ferry was doubtless built shortly thereafter. The settlement was then called Pursell's Ferry until 1807; from 1807 to 1820 as Romig's Ferry; from 1820 to 1839 as Fackenthal's Ferry, and after that during the remainder of its life as Johnson's Ferry. The name of the village was, however, changed to that of Monroe, December 3, 1823, when a post office of that name was established there. It was so named in honor of President James Monroe, through the influence of Michael Fackenthal, Sr., who was one of his admirers, and for whom, in 1816, he had been one of his presidential electors.

When the Belvidere Delaware Railroad was completed to a point opposite this ferry in 1853, a flag station was located there, called Holland, which was maintained for several years, and then discontinued. The present Holland railway station about two miles farther south is doubtless the direct successor of the one at the ferry. The compiler of these notes recollects, when a

small boy in the early sixties, of seeing this ferry in operation. On March 19, 1810, a charter was granted for a bridge at Monroe, then called Romig's Ferry, for which subscription books were opened in February, 1813, but for some unexplained reason it did not materialize.

(5 Smith's Laws, page 111, and Advertisement in the *Pennsylvania Gazette*, February 6, 1813.)

DURHAM CAVE FERRY—Located on the river bank immediately in front of the Durham cave in Durham Township, Bucks County, Pa., to Holland Township, Hunterdon County, N. J. There is no record at hand to show when this ferry was first established. Some local historians date it back to 1727, when the old charcoal blast furnace at Durham was first started, but there is no documentary or other proof of any kind to sustain that assumption. There was, in fact, no need of a ferry by the furnace company at that early day, as the output of their plant was shipped down the Delaware by Durham boats. And moreover the exclusive ferry grants to David Martin in 1739, for a period of seven years, included both sides of the Delaware from one mile above Easton to Tinicum Island, below Frenchtown, N. J. The beginning of this ferry doubtless dates from about 1742, or when the first forges were built on the Musconetcong Creek in New Jersey. It is sometimes referred to as Stillwell's and sometimes as Brink's Ferry.

The original charcoal furnace was located about two miles west from the Delaware, on the Durham Creek at the village of Durham. The Pennsylvania State Historical Commission has expressed a desire to place markers at the side of this old 1727 blast furnace, and at the Mansion House nearby the furnace site to mark the home of George Taylor, where he lived on August 2, 1776, when he signed the Declaration of Independence.

DURHAM FURNACE FERRY—This might properly be called a successor of the Durham Cave Ferry, as it crossed the Delaware at about the same place, but there was an interval of a century between them.

When the new and enlarged blast furnace at Durham was put in operation, a more pretentious ferry system was built, with wire rope cables and a large top-deck boat for carrying iron ore and other supplies over the river to the works, and to

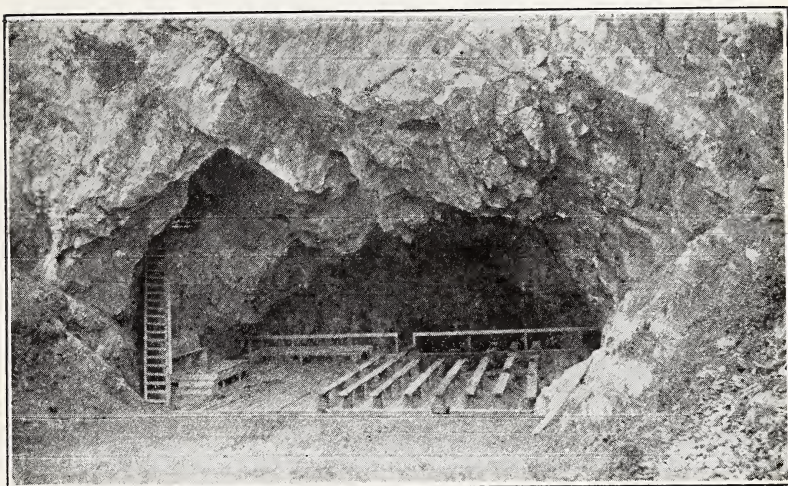
take back pig iron and castings. The first boat was launched February 16, 1877. It was 50 feet long, with a capacity of five small narrow gauge cars, to which the stock was transferred. The cars had a capacity of $2\frac{1}{2}$ tons each, making a load of $12\frac{1}{2}$ tons of raw material on each trip. On May 10, 1879, a much larger boat was put in commission, with two standard gauge tracks thereon, carrying four large standard railroad cars on each trip. Standard gauge tracks were put down from the river on the New Jersey side, to connect with the Pennsylvania Railroad (Belvidere Delaware Division), where the Railroad Company had put in sidings to accommodate about 100 cars, and similar standard gauge tracks were put down on the Pennsylvania side, from the river to connect with the ramification of tracks through the stock houses and around the plant. This was a primitive way of supplying the furnace with stock and shipping its output, but it served the purpose, although its operation was often interrupted by high water, and sometimes by ice. In 1896 the Quakertown & Eastern Railroad was completed as far as the Durham furnace, when the ferry was no longer required, and it was then abandoned.

When the Bucks County Historical Society met at Durham Furnace in 1885, the party arriving, by special train, from Lambertville and other points south, was transferred at the New Jersey siding, to low-sided freight cars, fitted with seats, which were ferried over the river into the works, landing near the manager's house, where lunch was served on the lawn, they inspected the works, some going to the mines, after which they were conducted to the Durham cave, where the meeting for reading and discussing papers was held. A half tone engraving, showing the arrangement of seats in the mouth of the cave, is presented herewith.

In like manner members of the American Institute of Mining Engineers, who were holding their meeting, May, 1886, at Bethlehem, Pa., were brought down to the New Jersey siding by special train, ferried over the river, given lunch on the lawn of the manager's house, after which a business meeting was held in the mouth of the Durham cave. At the close of the meeting they were transferred to canal scows, drawn by mules, and taken down the canal, past the Nockamixon palisades, taking their special train at Milford, N. J., back to Bethlehem. This

train was run under direction of the superintendents of the Lehigh Valley and Pennsylvania Railroads, both of whom were present at the meeting. Etchings of the engineers and their friends, photographed in the mouth of the cave, and of their embarking on the boats for their trip down the canal, are shown herewith.

HENRY QUINN FERRY—From Durham Township, Bucks County, Pa., to Holland Township, Hunterdon County, N. J. This was a private ferry and therefore not required to have a



DURHAM CAVE

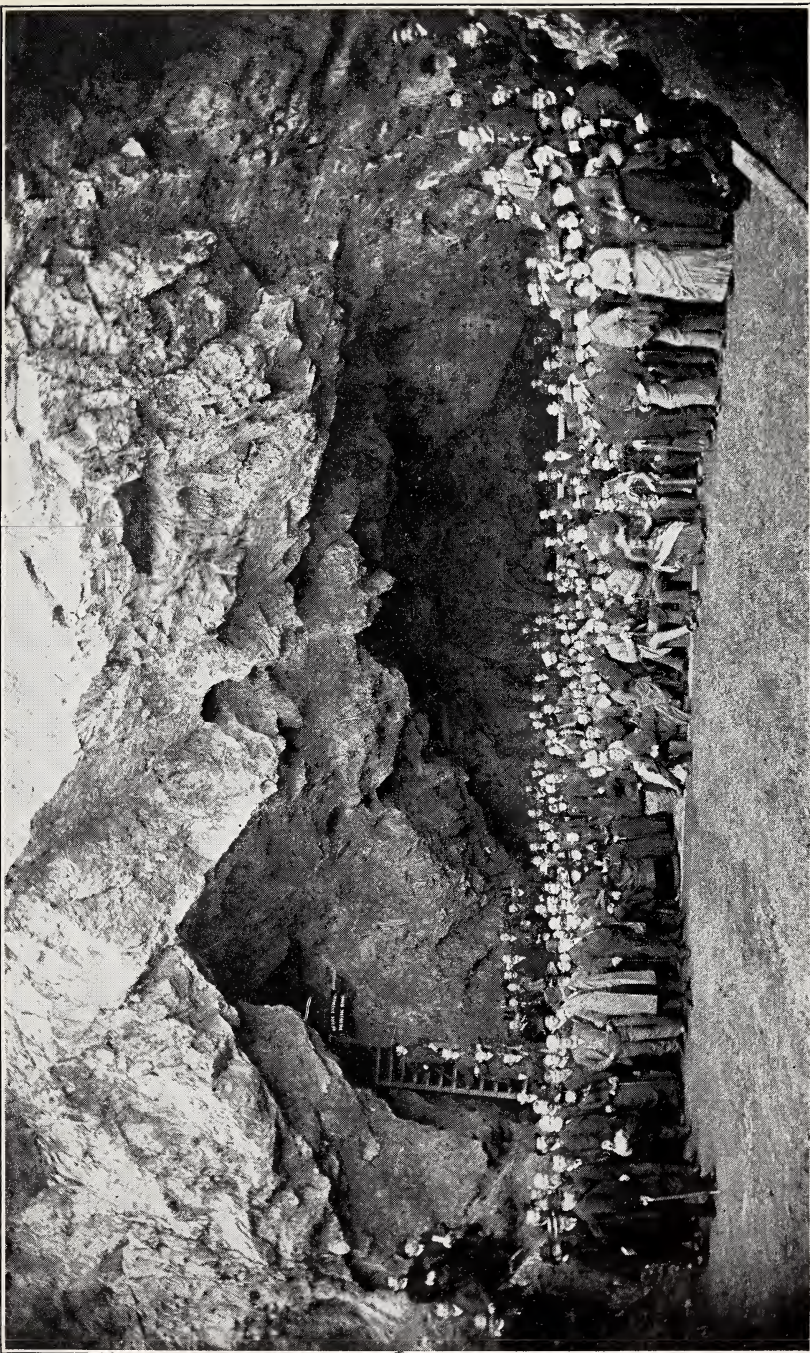
Showing seats and platform, as arranged for meeting of the Bucks County Historical Society, July 28, 1885. The stairs lead up to "Queen Esther's Drawing Room." The American Institute of Mining Engineers held a session in this cave, May 20, 1886, using the same seats and platform.

license. The Pennsylvania end was located close within the southern boundary of what is now the incorporated borough of Riegelsville. On the Pennsylvania side Quinn had installed an incline plane, with car and windlass to haul the cargo from his ferry boat up the river bank to the towing path of the Delaware Division Canal. The New Jersey end was at his mills, just below Durham Rapids (2 ft. 9 in. fall in 350 feet), where he had built a wing-wall dam in the river to supply power for operating his mills. This ferry operated only during naviga-

tion season on the canal, and unlike any other ferry on the river, at that time, was equipped with a low-down rope cable attached to eye bolts leaded in rocks on both sides, with pulleys attached to both ends of his scow, which was propelled by pulling it back and forth across the river. The eye bolt on the Pennsylvania shore can still be seen. This ferry was built by Mr. Quinn to ship the product of his mills by canal, and continued in operation until his mills were destroyed by fire in 1849. The sawmill was rebuilt by other parties, and continued in operation until about 1900, when it was permanently abandoned.

(Bucks County Historical Society Papers, Vol. III, page 526.)

RIEGELSVILLE FERRY—From Riegelsville, Bucks County, Pa., to what is now Riegelsville, Warren County, N. J. In 1773, when the then owners of the Durham Iron Works, divided their real estate by deed of partition, they had a survey and map of the property made. On this map there is laid down a road from the furnace at the village of Durham, following the Durham Creek, to the Delaware River, terminating on the north side of the creek, near the mouth of the Durham cave, and there the early ferry was located. It was over that road that the Durham Iron Works hauled its product for shipment by Durham boats, and is the only road shown on that plan leading through to the Delaware River, clearly indicating that there was no ferry at Riegelsville at that time. By this deed of partition, Tract No. 32, containing 258½ acres, was allotted to Hon. James Hamilton, erstwhile Lieutenant Governor of Pennsylvania, and in 1771, president of the Provincial Council. This tract extends from the apex of the hill back of Riegelsville for nearly a mile to the Delaware, its northern boundary passing through the center of the present Main Street. On April 21, 1774, Hamilton conveyed this tract to Wendel Shenk, a blacksmith, of Williams Township. About that time a road was laid out along the northern boundary of the Shenk tract, connecting at the western base of the hill with the before mentioned creek road, and extending to the Delaware. Shenk located his farm buildings and blacksmith shop, on the river bank, about where the Boyer buildings now stand, and there he established his ferry, which continued in his possession and that of his brother, Anthony Shenk, for some years, giving to



MEMBERS OF THE AMERICAN INSTITUTE OF MINING ENGINEERS AND THEIR FRIENDS

Assembled in the Durham Cave, May 20, 1886. This cave originally was about 300 feet long, but was destroyed by blasting down the limestone for furnace flux and for burning into lime.

the settlement the name of Shenk's Ferry, and by that name it was known until April 9, 1806, when Benjamin Riegel, a stone mason (but later known as Benjamin Riegel, farmer), bought the greater part of the tract, and with it the ferry, and thereafter the place was called Riegelsville, and the ferry, on the Pennsylvania side, Riegel's Ferry. In the division of the Durham lands, that part on which the blast furnace, forges and mines were located, was partitioned to Joseph Galloway and his wife, nee Grace Growdon. From the Galloways, George Taylor (a signer of the Declaration of Independence) leased the plant from 1773 to 1778. Taylor was also interested in the operation of the Chelsea and Greenwich forges on the Musconetcong Creek in New Jersey, and used Shenk's Ferry for interchange of product, as did also the Backhouse administration from 1779 to 1794. Prior to the building of Shenk's Ferry the interchange was doubtless made by the ferry at mouth of Durham Creek. The New Jersey landing was immediately north of the Musconetcong. On that side of the river the ferry took the name of the property owners, thus it was known as Hunt's Ferry till 1786, Watring's Ferry from 1786 to 1808, Leidy's Ferry from 1808 to 1828, and as Riegel's Ferry from 1823 until the river bridge was opened for travel in 1837. On the completion of the Belvidere Delaware Railroad (now part of the Pennsylvania system) to Riegelsville in 1854, the station was named Riegelsville. The post office was called Musconetcong, N. J., but was changed to Riegelsville, N. J., July 6, 1876. (For Riegelsville bridge, see page 176.)

RAUBSVILLE FERRY—From Raubsville, Northampton County, Pa., to Carpentersville, Warren County, N. J. There were two ferries here at different times and at different landings.

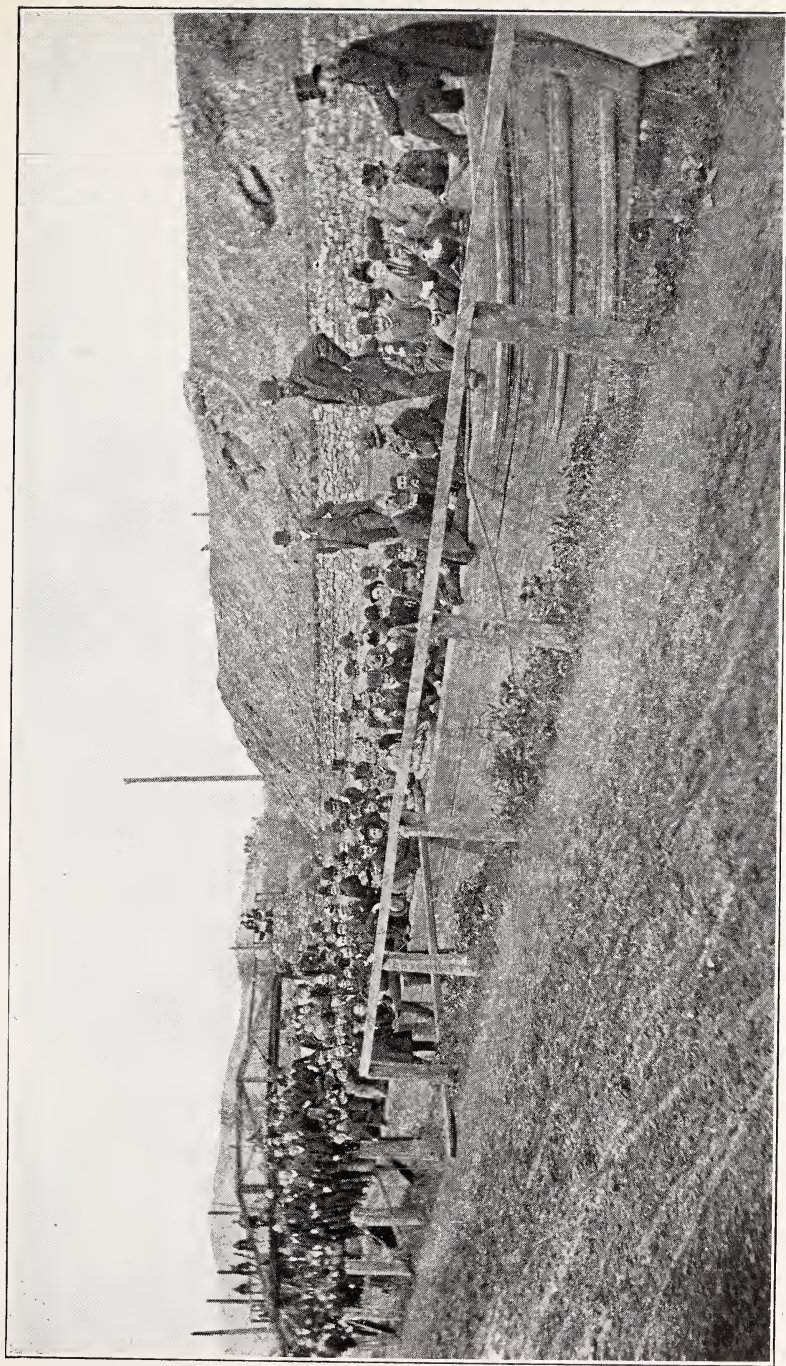
The first crossing just below "Old Sow" Island to a point immediately below the present Carpentersville station of the Pennsylvania Railroad. There is no reliable data to show when this ferry was first put in service. It appears that there was a public highway across New Jersey at an early day, with an outlet to this ferry, and a highway on the Pennsylvania side leading westwardly two and one-half miles to connect with the Durham Road (sometimes called the Philadelphia Road). It is said the ferry was set up as early as 1805, or about the

time the first hotel was built by Peter Raub, which gave the settlement the name of Raubsville. There was no other outlet from the ferry at that time, as the river road was not officially laid out until 1817. When the canal was dug through Raubsville in 1829 the alignment of the river road was somewhat changed.

The survey of the Delaware Division Canal on file at Harrisburg, bearing date 1827, shows a ferry on the river at the southern end of "Ground Hog" island, opposite a hotel then owned by Godfrey Raub. As that hotel was built in 1812, it can be presumed that the ferry was erected shortly thereafter, probably in 1817 when the river road was laid out. This old stone building, later converted into a dwelling house, is now (1932) occupied by the family of Milton H. Rice. It is likely that when this ferry was abandoned it was succeeded by the ferry half-a-mile farther up the river opposite "Ground Hog" locks, where a distillery had been built by Peter Uhler, the date of which is not at hand, but it was in operation during the Civil War; owing, however, to objectionable excise laws it was closed down immediately thereafter. Mr. Uhler then converted the distillery into a paper mill for the manufacture of paper boards out of straw. This operation continued, probably until 1872, when it was shut down. In 1890 the property was purchased by Adolph Segal, who changed the machinery and manufactured waxed tissue paper, but his operations were not a financial success, and was the beginning of a checkered career for that plant, which changed hands quite often, shut down many times, sold out by the sheriff at least twice, making different kinds of paper under each reorganization, and again became financially embarrassed in 1928, when it was again shut down. In 1930 this paper mill was destroyed by fire.

This second ferry was operated mainly for the accommodation of the distillery and paper mill, and continued in service until about 1916, when the paper mill company erected a steel wire cable tramway over the river. This tramway was operated but a few years, when it was abandoned, as it was found to be cheaper to handle all material by automobile trucks.

On March 31, 1903, the ferry boat while crossing to bring back coal from New Jersey, capsized in midstream, plunging two double teams with drivers and the ferryman into the river.



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Embarking on canal boats, May 20, 1886, for trip down canal, past the Nockamixon Palisades. One of the

Durham Furnace slag dumps is shown in the background, along the bank of the Delaware River.

Nathaniel Bougher, one of the teamsters, was drowned, as were also the four horses, but James Kreitz, the other teamster, and William Loux, the ferryman, saved their lives by clinging fast to the capsized ferry boat, which broke loose from the cable and floated down stream.

On February 27, 1854, a charter was granted to the Carpentersville Delaware Bridge Company for a bridge over the river at this place, but for lack of financial support it was not built. Again on April 3, 1903, a second charter was granted by Pennsylvania to the Warren Bridge Company, with concurrent legislation by New Jersey, April 17, 1903, but the New Jersey act was repealed March 13, 1925, and thus the second attempt to build a bridge failed to materialize.

(Pamphlet Laws of Pennsylvania, for 1854, page 128, and for 1903, page 147.)

EASTON, PA., TO PHILLIPSBURG, N. J.

The recorded history of the ferry between Easton and Phillipsburg is conflicting, partly due to the fact that all the grants and other data may not be at hand. We refer particularly to the grants to David Martin, for rights on the New Jersey shore, of which but one is at hand, whereas it is quite evident that there were two, as can be deduced from the following:

From a deed on record at Newton, Sussex County, N. J. (Recorded Book A, pp. 271 to 274), bearing date September 26, 1788, from Tench Francis to John Penn, Jr., it appears that letters patent for a ferry or ferries over the Delaware, together with 105 acres of land and a certain ferry right, were granted by King George II, on February 12, 1739, to David Martin, of Trenton, N. J., with the "sole liberty and privilege of keeping and employing a ferry or ferries at the mouth of a creek called Lopetekong, then in the County of Morris (but now since the division of the counties found to be in Sussex) * * * at a certain distance on each side of the said creek along the shore, that is to say, from the place called Lopetekong to the south of a creek called Muskonetkong, where the said creek empties itself into the River Delaware, down the said river and up the said river from the said place called Lopetekong to the place where the North Branch and West Branches of the said River Delaware meet, commonly called and known by the name of Forks of Delaware."

The deed further recites that David Martin became indebted to a certain Abraham Bennett, whose administrator, Abraham Bennett, Jr., recovered against the administrator of David Martin, deceased,²⁴ whereupon the property was sold by John Ford, High Sheriff of Morris County, and conveyed February 16, 1773, to Richard Peters, and by indenture bearing date, June 7, 1777, Richard Peters conveyed it to Thomas Willing and Tench Francis, both of Philadelphia, and Philip Livingston, the younger, of New York. That Tench Francis, sole, conveyed the property, September 28, 1788, to John Penn, Jr., for the consideration of £1,000, gold and silver money. It is recorded in several histories that the Penns bought this land, which included part of the site of the present city of Phillipsburg, fearing that the town of Easton, Penn's "Manor of Fermor," would be retarded if Phillipsburg was allowed to grow. A map of the survey of this 105 acres of land can be seen in "Historic Easton from the Window of a Trolley Car," page 82.

According to the above recited deed, David Martin's ferry-grant extended from a point above the Lopatcong Creek, opposite the junction of the two rivers, to the Musconetcong Creek at Riegelsville, N. J., a distance of about nine miles. At that time the lands south of the Lehigh, also referred to as the Forks of the Delaware, having been settled earlier, contained more houses than did the north side. From these facts, and the laying out of a road from this ferry to Bethlehem in 1745, although not built until 1755, we are inclined to the opinion that the ferry landing was on the south side of the Lehigh, at a place later called Snufftown. Later plans of Easton show a ferry landing at "the point," on the north side, at the foot of Ferry Street.

It further appears that a patent for a ferry or ferries on the Pennsylvania side was granted by the Penns to David Martin, of Trenton, under date December 23, 1741, which recites in part as follows (Patent Book A, Volume 9, page 511, etc.):

"Whereas David Martin of Trenton in West Jersey, Gentleman, hath lately obtained from his present Majesty King George, a grant of the sole liberty and privilege of erecting & keeping one or more ferry's upon the east side of the River

²⁴ From this it can be inferred that David Martin died about 1772, or early in 1773. He was a sheriff of Hunterdon County probably from 1739 to 1749, when he was appointed a justice. (History of Hunterdon County, pp. 258-260, and New Jersey Archives, First Series, Vol. VII, page 86.)

Delaware between a place in Hunterdon County opposite the head of an island in the middle of sd river called Tincym Island and an high rock in Morris County called ye Marble Mountain about a mile be it more or less above the Forks of Delaware. And that the said David Martin having now likewise requested of us a grant of the like liberty and priviledge of having and keeping one or more ferry's on our west side of the river opposite to that of those which he shall so erect and keep on the east side thereof" * * *

* * * "Do give, grant and confirm unto the said David Martin, his executors, administrators and assigns, the sole liberty and privilege of keeping & imploying a ferry or ferry's in the most convenient place or places on the Pennsylvania shore of the Delaware River from the place in Bucks County opposite to the upper end of the afs'd island called Tynicomb, to the place in the sd county opposite a high rock in Morris County (now Warren) called Marble Mountain, about a mile, be it more or less, above the Forks of Delaware." * * * "from the first day of March next until the full end and term of seven years."

The above last recital of the New Jersey grant to David Martin describes a river frontage so much greater than that of 1739, which leads to the opinion that a second or revised grant had been made to him by New Jersey. The 1739 grant covers a river frontage of about nine miles, extending from Lopatcong Creek, south to Musconetcong Creek at Riegelsville, N. J. Whereas the New Jersey grant, as recited in the Pennsylvania patent, refers to a river frontage of about twenty miles, beginning at Marble Mountain, one mile above the mouth of the Lehigh River to the head of Tincum Islands, the most historic of which is Marshall's Island. This group of islands is called "Tincum Islands" on Reading Howell's map of 1783. (For bridge over the Delaware, see page 176.)

David Martin's ferry over the Delaware, first chartered by New Jersey in 1739, but probably not set up until 1741, when the Pennsylvania patent was granted, crossed the river from the mouth of Lopatcong Creek, about half-a-mile below what is now Centre Square, Phillipsburg, landing in Pennsylvania, south of the Lehigh, at Williamsburg, Williams Township, later Snufftown, and after the canal was built called Williamsport, but now

part of South Easton. David Martin was a resident of Trenton, N. J., and it is not likely that he operated this ferry in person for any length of time and probably not at all. In 1755 he leased it to Nathaniel Vernon, who kept a tavern at his ferry house at the foot of Ferry Street, Easton.

It is likely that there was a ferry equally early over the Lehigh, of which, however, there is no record. There was, however, a ferry there in 1755, when the Philadelphia Road was extended from Durham, over "Mammy Morgan's Hill" to South Easton, the Easton landing of which was at the foot of Fourth Street. Later the ferries over both rivers were consolidated under control of Lewis Gordon, Esq., who sublet them to Daniel Broadhead, under whose management they remained but a short time. Gordon then resumed possession, employing ferrymen, as he was himself engaged in the practice of the law. He was in possession of the ferries during the outbreak of the Revolutionary War. For a time he was loyal to the American cause, but later became a Tory, and on August 6, 1777, both he and his son, John Gordon, were arrested and ordered to be imprisoned; they were, however, put under parole from which they were discharged April 23, 1778.²⁵ On March 7, 1778, the ferries were taken over by Jacob Able, who was also later suspected of disloyalty, and a military guard was therefore placed at both ferries, and all strangers required to show their credentials before crossing. In 1780 Jacob Able was assessed for a ferry and a tavern. The ferry-landing was then at the foot of Ferry Street, called "the point." After the close of the war the Lehigh ferry came into possession of Abraham Horn, a carpenter. In 1800 the New Jersey rights of the Delaware River ferry were bought by Thomas Bullman, who remained in control on that side until the toll bridge was opened in 1806.

By act of the Assembly passed April 4, 1796, a bridge over the Lehigh River at Easton was authorized, which was built in 1798 by Abraham Horn, then in control of the ferry, which landed at the foot of South Third Street. It was built of wood,

²⁵ Lewis Gordon came from Aberdeen, Scotland, in 1750. He is said to have been the first attorney admitted to the bar of Northampton after the county was erected out of Bucks in 1752. He served as recorder and prothonotary of Northampton County from 1760 to 1777. The date of his death seems to have been about 1780.

having but one span, 280 feet long, which fell of its own weight a few days after opening.

There is a well-authenticated family tradition that Dewalt Drumheller and his son, George, both blacksmiths, forged the iron work for this first bridge. Dewalt Drumheller from February 3, 1767, to August 1, 1787, owned 74 acres of land on the south fork of the Delaware and Lehigh in what was then called Williamsburg.

Mr. Horn replaced the broken down bridge with another wooden bridge, having three spans, for which the County of Northampton later reimbursed him. This second bridge stood until 1811, when it was destroyed by a freshet. A suspension chain bridge was then built and opened the same year (1811), which served until 1837, when it was replaced by a wooden bridge, which was carried away by the flood of 1841. In 1843 another bridge, covered and of wood construction, was opened, which, in turn, was carried away by the flood of 1862. Another wooden bridge, with double driveways, followed, which served until 1888, when it was found to be no longer suited for the heavy traffic and was accordingly condemned. It was replaced by one of iron construction, with driveways 60 feet wide, costing \$35,000. Owing to the increasing heavier traffic this bridge was also found to be unsafe, and in 1912 was replaced by the present concrete arch bridge, which to all appearance should stand for many years. Both ferries at Easton, particularly during their latter years, were profitable operations. Both Easton and Phillipsburg are noted on Evans' map of 1749. (For Easton bridge, see page 176.)

(Colonial Records, Vol. XI, pp. 73, 263; Pennsylvania Archives, first series, Vol. V, page 490, and Vol. VI, pp. 431, 435; History of Northampton County, page 156; Henry's History of the Lehigh Valley, pp. 57, 120; History of Warren and Sussex Counties, page 551; Condit's History of Easton, page 31; Statutes at Large, Vol. XV, page 466.)

FERRIES ON THE DELAWARE RIVER BETWEEN EASTON, PA., AND PORT JERVIS, N. Y.

HARMONY FERRY—From Forks Township, Northampton County, Pa., to Harmony Township, Warren County, N. J. This is an ancient ferry, referred to as Hunter's Ferry in 1753 when Oxford Township was erected. It is also referred to in the New Jersey Archives in 1762, by that name. (Vol. XXIV,

page 63.) During its earlier years it was an active and prosperous crossing. Located at what is now Harmony station of the Pennsylvania Railroad, about five miles above Phillipsburg, N. J.

MARTIN'S CREEK FERRY—From Martin's Creek, Lower Mount Bethel Township, Northampton County, Pa., to Brainards, Harmony Township, Warren County, N. J., about $2\frac{1}{4}$ miles above Harmony Ferry, of which it seems to have been the successor. Located immediately above the mouth of Martin's Creek. It was an active and profitable ferry prior to the building of the railroad bridge. We are told that in the year 1877, its gross receipts amounted to \$5,500, derived mostly by the transportation of roofing slate. On a map published in 1828 the New Jersey side is called Ramseysburg, and the ferry Snyder's Ferry. This ferry continued in operation several years after the Pennsylvania Railroad Company built a bridge over the river at that place. The bridge has a passage-way for foot passengers. A charter was granted by Pennsylvania, April 3, 1903, with concurrent legislation by New Jersey, April 17, 1903, to the Northampton Bridge Company for a toll bridge at that place, for which land was bought of G. M. Vannatta on the New Jersey side for a landing. The bridge, however, was not built, and the New Jersey act was repealed, March 13, 1925.

DEPUY'S FERRY—This ferry is noted as Depuy's Ferry on a map published in 1828, but it appears that a charter was granted by Pennsylvania, July 24, 1868, to Aaron W. Hazen, to cross from Richmond Road, in Lower Mount Bethel Township, Northampton County, to Roxburg station of the Pennsylvania Railroad in Warren County, N. J. The best information obtainable shows that it stopped operating in the late 1890's.

FOUL RIFT FERRY—From Lower Mount Bethel, Northampton County, Pa., to White, formerly Oxford Township, N. J. This is an ancient ferry, said to have begun operating in 1751 and which, according to the New Jersey Archives (Vol. XVI, page 509), was granted a patent, March 3, 1755. It was located at the foot of Foul Rift, $2\frac{1}{2}$ miles above Depuy's Ferry. On the New Jersey side it used the landing just north of Shippen's Spring, built by Jonathan Robeson in 1743, for shipping the

product of the Oxford Iron Works, on Durham boats, down the Delaware Abandoned about 1860.

BELVIDERE FERRY—From Riverton, Lower Mount Bethel Township, Northampton County, Pa., to Belvidere, Warren County, N. J. There are no data at hand to show when this ferry was started; Belvidere was founded by Robert Hoops in 1770, and was first called Hoops. Later it was called Mercer. It is recorded that the product of Hoops' flouring mill on the Pequest was carted to the wharf below Foul Rift, above referred to, and shipped down the Delaware on Durham boats. After Foul Rift was improved Durham boats landed at the foot of what is now Water Street, Belvidere. This ferry suspended operations when the river bridge was opened for travel in 1836. (For Belvidere bridge, see page 177.)

HARTZELL'S FERRY—From Upper Mount Bethel Township, Northampton County, Pa., to Oxford Township, Warren County, N. J. About midway between Belvidere and Manunka Chunk. In 1783 this was known as Mack's Ferry; later as the Jackson Hartzell Ferry, and then as Boardman's Ferry. For a time it was known as the William Emery Ferry. Indicated on Beers' Atlas of 1874, and on Geological Survey Quadrangle.

MYERS' FERRY—From Upper Mount Bethel Township, Northampton County, Pa., to Delaware, Knowlton Township, Warren County, N. J. In 1783 it was known as Attine's Ferry, and in 1803 as Alburtain's Ferry. On Melish's Map of Pennsylvania, published in 1826, it is noted as Auter's Ferry; later it was called Myers' Ferry, then the Charles Hartzell Ferry, and still later it was owned by Edward McCracken, who operated it until 1914, when he sold it to the Knowlton Turnpike & Bridge Company, who had become the owners of the abandoned Delaware, Lackawanna & Western Railroad bridge, whereupon the ferry stopped operating. (See toll bridges, page 167.)

DILL'S FERRY—From Portland Northampton County, Pa., to Columbia, Knowlton Township, Warren County, N. J. What is now Portland was formerly the village of Dill's Ferry. Portland was incorporated into a borough, October 21, 1876. The ferry was located a few rods north of the present river bridge. It is recorded that a Mr. Smith owned the first ferry rights, and

that Mr. Dill was the ferryman, probably about 1780. Columbia, formerly called Kirkbrides, was laid out in 1813. On the New Jersey side the ferry was, in 1774, known as Goodwin's Ferry. The ferry shut down in 1869, when the toll bridge was opened for travel. The Lehigh and New England Railroad bridge, built in 1890, spans the river immediately north of the toll bridge. (For Portland-Columbia bridge, see page 178.)

DECKER'S FERRY—At Slateford, Upper Mount Bethel Township, Northampton County, Pa., to Knowlton Township, Warren County, N. J. This ferry was established by George Decker, who was granted a charter by the legislature of Pennsylvania, February 12, 1856, and was used principally by him to ferry over slate from his quarries for shipment by the newly constructed D. L. & W. Railroad. The town of Slateford was founded by Hon. James M. Porter, who owned and operated a valuable slate quarry about half-a-mile to the northwest. The ferry is indicated on Beers' Atlas of Warren County, published in 1874.

(Laws of Pennsylvania, for 1856, page 43.)

DUNNFIELD FERRY—From information furnished by Edward L. Lanterman, of Blairstown, N. J., we learn that there was an ancient ferry originally known as Decker's Ferry, operated by Jacob Decker and his son, Jacob Decker, Jr., crossing the Delaware from Dunnfield, Pahaquarry Township, Warren County, N. J., to Smithfield Township, Monroe County, Pa. For a time it was operated by John Zimmerman. Located immediately south of the Delaware Water Gap, affording a crossing between the States before there was a road through the Delaware Water Gap on the Pennsylvania side of the river. It was not until 1798 that Anthony Dutot (founder of Delaware Water Gap, originally called Dutotsberg) built a trail through the gap, which he enlarged into a toll road for wagons in 1800. This highway through the gap on the Pennsylvania side was changed to its present location in 1853, when the D. L. & W. Railroad was built. The ferry appears to have been abandoned about 1888.

TRANSUE'S FERRY—Crossing the river about 200 feet above the N. Y. S. & W. Railroad Company's bridge at Water Gap station, between the Delaware Water Gap and Shawnee, in Smithfield Township, Monroe County, Pa., to Pahaquarry

Township, Warren County, N. J. This is a private ferry erected about 1882 by Adam Transue. Now operated by the Karamac Hotel Company, at "Far View," located on the shore of the Delaware in New Jersey.

SHAWNEE FERRY—Located a short distance below the old Depue mansion, now the summer home of Charles C. Worthington, in Smithfield Township, Monroe County, Pa., crosses the Delaware between Shawnee and Depue Islands to Brotzmanville, Pahaquarry Township, Warren County, N. J. In 1760 it was known as the Old Shoemaker Ferry; at one time it was called Brotzman's Ferry. For many years it was owned and operated by Charles Walker, and known as Walker's Ferry, and as such it is indicated on Beers' Atlas of Warren County. Since 1903 it has been owned and operated privately by Mr. Worthington, who owns the Buckwood Inn and practically the entire village of Shawnee, as well as both islands above referred to, and also a large acreage of land on the opposite side of the river in New Jersey, where he has established a game preserve, and from whence at Sun Fish Lake, he supplies his town with spring water.

SHOEMAKER'S FERRY—From Smithfield Township, Monroe County, Pa., to Pahaquarry Township, Warren County, N. J. Operated by Daniel Shoemaker in 1812. Beers' Atlas, published in 1874 (page 90), refers to M. C. Shoemaker as the ferryman at that time. At one time it was known as Lutz's Ferry. This ferry was later owned by Hiram Zimmerman, now of East Stroudsburg, who operated it for 25 or 30 years and then in 1927 sold it to the Pennsylvania Power & Light Company.

(History of Warren and Sussex Counties, pp. 697, 698 and 1072.)

FISHER OR DIMMICK'S FERRY—From Middle Smithfield Township, Monroe County, Pa., to Pahaquarry Township, Warren County, N. J., about five miles above Shawnee. The New Jersey landing is a short distance south of the old Pahaquarry copper mines. For a time it was operated by Shoemaker, brother of Daniel Shoemaker, who operated the last above named ferry. It is told of these brothers, that one was a Republican and the other a Democrat, and that whenever they met they would quarrel about politics. Beers' Atlas, published in 1874,

refers to W. L. Fisher as the ferryman there at that time. Since 1881 this ferry has been in possession of Peter M. Dimmick and his father. It is still (1932) owned and operated by them. It is one of the four ferries still in operation on the Delaware below Port Jervis. It is equipped with an overhead steel wire rope cable, which is used during high water. There is an eddy at the location of this ferry, which enables Mr. Dimmick to operate with water twelve feet above low water mark, but when the river is low he uses a low-down cable (a three-eighths wire rope), which rides on two open hooks, one at each end of the boat, and by means of which his boat is pulled back and forth across the stream, as the boat passes along the rope sinks to the bottom of the river. His ferry boat is 45 feet long by 10 feet wide with a double bottom, on the top one of which his cargo is placed. He can carry two large automobiles at one trip. This ferry was visited September 12, 1928.

DECKER'S FERRY—Sometimes called Walpeck's Ferry. At Walpeck Bend, on the river road, above Shawnee, near what is called the "Hog Back" road, which leads over the mountain following the bend of the river to the village of Bushkill. For a time it was known as Smith's Ferry. It crossed the Delaware from Walpeck's Point, in Middle Smithfield Township, Monroe County, Pa., to Flatbrookville, Walpeck Township, Sussex County, N. J. This is an ancient ferry, said to have been established before 1744, and was the crossing (above the Delaware Water Gap) used by early settlers and travelers who came into that region from Esopus, N. Y. (now Kingston) and followed the "Mine Road" along the New Jersey shore at the base of the Blue Mountains, near the old Pahaquarry copper mines. Early maps show this highway leading to the ferry and thence into Pennsylvania, crossing the Kittatinny or Blue Mountains at the Wind Gap. During the Revolutionary War, Colonel Philip Van Cortland's regiment,²⁶ which had wintered in Ulster County, N. Y., was, in 1779, ordered by General Washington to join General John Sullivan on his march to Wyoming and Tioga Point. They sent their baggage and supplies by wagon to Carpenter's Point, where it was transferred to boats and taken down

²⁶ For General Philip Van Courtlandt, see *Magazine of American History*, Vol. II, page 278. Also referred to in Caleb E. Wright's novel, *Rachel Craig*.

the Delaware to this ferry, a distance of about twenty-six miles. The regiment marched on the "Mine Road," which led direct to this ferry, where they crossed into Pennsylvania, and thence, with their equipment, resumed their march to Fort Penn at Stroudsburg, where they received orders to join Sullivan's army at what is now Tannersville in Monroe County. According to the History of Sussex and Warren Counties (page 323), this ferry was established by Daniel Decker, and remained in the Decker family, continuously, for more than a century, suspending operations about 1898. It was succeeded by the Rosenkrans' Ferry (q. v.). In 1859 a charter was granted by both states to the Flatbrookville Delaware Bridge Company, for a bridge to cross the river at this place, but the undertaking was not carried out.

(History of Northampton County, page 55, and History of Sussex and Warren Counties, pp. 322 and 330.)

ROSENKRANS' FERRY—One mile above the village of Bushkill in Lehman Township, Pike County, Pa., to Walpeck Township, Sussex County, N. J. This ferry is a direct successor to Decker's Ferry, last above described, which was closed down about thirty years ago, or in 1898. Owing to the bend in the river this ferry is but three-quarters of a mile by land above the old Decker's Ferry, but by water, following the bend of the river, the distance is about two miles. This is one of the four ferries, all below Port Jarvis, still operating on the Delaware. It has been owned and operated by Philip S. Rosenkrans ever since Decker's Ferry closed. Mr. Rosenkrans says he is operating without a license, but, in fact, it being the successor of Decker's Ferry, is operating under the same grant. It is equipped with a steel wire rope cable suspended over the river. The ferry boat has a double bottom, on the top one of which his cargo rests. It is 43 feet long and 10 feet wide, with a capacity for carrying two large automobiles. Mr. Rosenkrans says he can operate in water ten feet above low water mark. This ferry was visited August 17, 1928.

DINGMAN'S FERRY—Founded by Andrew Dingman (born 1711), who first settled on the New Jersey side of the Delaware, and in 1735 moved to the Pennsylvania side, and became the pioneer settler of that place, which was at first called Dingman's

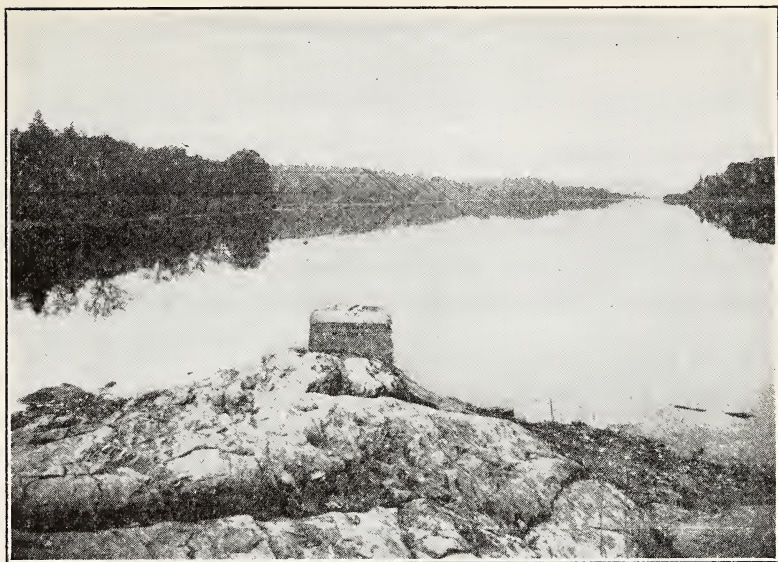
Choice. He established the first ferry on the river at that place, making the ferry boat with his hand axe out of forest trees. The ferry crossed between his home, which he built on the river bank, now in Delaware Township, Pike County, Pa., to Sandystone Township, Sussex County, N. J. For a long time Joseph Ennis was the ferryman. It continued in service for nearly a century, until 1834, when it was replaced by a toll bridge, the construction of which proved so defective that it was thrice destroyed. During the intervals of its rebuilding, ferry operations were resumed. (See Dingman's Ferry Bridge, page 179, post.)

(History of Wayne, Pike and Monroe Counties, pp. 908, 938.)

WELLS' FERRY—This ferry on the Delaware between Milford, Milford Township, Pike County, Pa., and Montague Township, Sussex County, N. J., was established before or during the Revolution by three brothers named Wells. The settlement was then known as Wells' Ferry. John Kittle was the ferryman in 1808. The ferry was discontinued in 1836, when the toll bridge was opened. The ferry was restored to temporary service in 1841, when the bridge was destroyed by the flood, again from 1846 to 1869, and again from 1888 to 1889, when the bridge was destroyed by floods or failed to stand owing to defective construction. (See Milford Bridge, page 179, post.)

PORT JERVIS FERRIES—There was an early ferry over the Delaware at Port Jervis, from the foot of Ferry Street to Matamoras, operated by the Westfall family. Also two ferries from Carpenter's Point, now Tri-state, at the junction of the Neversink and Delaware Rivers. One crossing to the New Jersey shore, the other to Matamoras, Pike County, Pa. For two generations John D. Carpenter and his son Benjamin were the ferrymen. These ferries continued in service until 1852, when the first bridge between Port Jervis and Matamoras was opened for travel.

Carpenter's Point is a long narrow neck of land separating the Delaware and Neversink Rivers, with only a few rods between the rivers for nearly a mile, and then ending in a wedge-like point, on the extremity of which the Tri-state corner is the separating point of New York, Pennsylvania and New Jersey state lines. A granite monument now marks the spot where the three states meet.



MONUMENT AT TRI-STATE ROCK ON THE DELAWARE RIVER

The water on right is the mouth of the Neversink River where it enters the Delaware. Port Jervis is one mile up the Delaware at the point shown on extreme right at top of picture.

TOLL BRIDGES ON THE DELAWARE RIVER BETWEEN PENNSYLVANIA AND NEW JERSEY

There are seventeen interstate bridges, formerly toll bridges, spanning the Delaware River between Pennsylvania and New Jersey, from and including the Lincoln Highway Bridge at Decatur Street, crossing from Morrisville, Pa., to Trenton, N. J., to the one below Milford, Pa., all of which by concurrent acts of the legislatures of both states are to be or have been taken over by the two states, and eliminated as toll bridges, as may be determined by the JOINT COMMISSION FOR ELIMINATING TOLL BRIDGES BETWEEN PENNSYLVANIA AND NEW JERSEY, of which Mr. Louis Focht is superintendent and engineer.

Sixteen of these were originally covered bridges of wood construction, but that character of bridge is fast disappearing, for at the present time (1932) but two of the sixteen remain, viz., the one between Upper Blacks Eddy, Bucks County, Pa., and Milford, N. J., and the other between Portland, Pa., and Columbia, N. J.

The bridge between Lumberville and Raven Rock has four spans of old wooden covered construction and one span, the second on the Pennsylvania side, of steel to replace a span carried away by the flood of October 10, 1903. The only one not covered and of wood construction, is the old railroad bridge south of Portland, Pa.

The first bridge to be granted a charter was that between Easton, Pa., and Phillipsburg, N. J., but the first to be completed and opened for travel was that between Morrisville and Trenton, chartered March 3, 1798, opened January 30, 1806. The Easton-Phillipsburg bridge was not officially opened until October 1, 1806.

All of these bridges were originally erected to replace river ferries. The following memoranda of them begins with the bridge at Trenton and thence follow in order up the river, to the last one at Milford, Pa.

TRENTON DELAWARE BRIDGE COMPANY—Called Lower Trenton or Decatur Street Bridge, crossing from Morrisville, Bucks County, Pa., to Trenton, N. J. Charters granted by New Jersey, March 3, 1798, and by Pennsylvania, April 4, 1798. Letters patent, August 16, 1803. Supplemental act by Pennsylvania, April 2, 1804, with concurrent legislation by New Jersey, extending the time for completion of bridge to March 3, 1812, but it was completed and opened for travel, January 30, 1806. A second supplement to the charter was granted March 3, 1868. The original bridge consisted of five spans of wood construction, having a total length of 1,025 feet. Each span was covered by a roof arched laterally, and in that respect differed from all other bridges on the river, which were covered longitudinally. It was designed and built by Theodore Burr, with arch and truss combined, at a cost of \$180,000. The first president of the company was Gen. John Beatty, who laid the foundation stone of the first pier. Cuts of this old bridge can be seen in Day's Historical Collections of Pennsylvania, page 169, and in Barber and Howe's Historical Collections of New Jersey, page 286. The bridge was remodeled in 1848. In 1851 the Philadelphia & Trenton Railroad Company built a bridge close to the south side of the toll bridge, as a passage-way for steam trains. That railroad was opened for travel between Kensington and Morrisville, a

distance of 26 miles, on November 1, 1834. (Many of the original papers, including the subscription lists of this road, which was built under contract by Richard Morris and Thomas G. Kennedy, are in the archives of the Bucks County Historical Society.) In 1875 the north or toll bridge was rebuilt of iron construction, after a design by Joseph Wilson, a noted engineer, later of Wilson Brothers & Company. During the same year (1875) the south truss belonging then to the Pennsylvania Railroad Company, was also rebuilt of iron construction and equipped with double tracks; this bridge was in turn abandoned and replaced by two double track bridges of steel construction in 1892 and 1898, respectively. In 1908, on completion of its stone arch bridge, immediately south thereof, the railroad company took down the superstructure of the two steel bridges and used the material in construction work at Washington, D. C. This toll bridge, the first on the river to be opened for travel, was also the first one to be taken over by the Joint Commission, viz., on July 12, 1918, at a price of \$240,000. During 1928, the Joint Commission built a new double roadway bridge of steel on the piers of the abandoned railroad bridge, with a sidewalk on the north side. The roadways have an aggregate width of 42 feet. The estimated cost of this new bridge is \$650,000, which is now called the Lincoln Highway Bridge. On its completion the old north bridge, built in 1876, was sold and the superstructure removed.

(Davis' History of Bucks County, Vol. II, pp. 165, 169.)

TRENTON CITY BRIDGE COMPANY—Known as the Upper Trenton or Calhoun Street Bridge, which replaced the Calhoun Street or Beatty Ferry, crossing from Morrisville, Pa., to Trenton, N. J. Incorporated, February 24, 1840, with supplementary acts of March 15, 1847; April 13, 1859; March 28, 1860, and February 19, 1861. Original capital, \$48,000; cost of bridge, \$60,000. Opened for travel in 1860. Originally a covered bridge of wood construction having seven spans with a total length of 1,274 feet, including the bridge over the Trenton Delaware Falls Company's canal. Bridge totally destroyed by fire in 1882. Rebuilt in 1884 of iron construction, two trusses, double driveway and a sidewalk outside of the north truss. The trolley tracks of the Pennsylvania and New Jersey Traction Company pass over this bridge. Located about one mile above

the Decatur Street Bridge, and being just above high tide, was not damaged by any of the floods. Taken over by the Joint Commission November 14, 1928, at price of \$250,000. (For Calhoun Street Ferry, see page 136, ante.)

YARDLEYVILLE DELAWARE BRIDGE COMPANY—From Yardley (formerly Yardleyville) to Wilburtha (formerly Greensburg). Charter granted by New Jersey, March 2, 1835, and by Pennsylvania, April 15, 1835. Opened for travel in 1835. Supplemental acts, April 11, 1859, exempting persons going to and returning from church from paying tolls. Originally a covered bridge of wood construction, with six spans and a total length of 903 feet, including a span over the Trenton Delaware Falls Company's canal.²⁷ Three spans carried away by the flood of January 8,

²⁷ **TRENTON DELAWARE FALLS COMPANY**—This is a water-power canal, on the New Jersey side of the Delaware, authorized by act of the New Jersey legislature, February 16, 1831 (capital \$100,000), with authority to build a dam in the river at Scudder's Falls, about one mile north of the Yardley bridge, at the head of Slack's Island, to furnish hydraulic power to certain industries in Trenton. The canal had a total length of about seven miles, with an operating fall of 18½ feet, to where it debouched into the Delaware at Lambertson, now the southern part of Trenton, with an estimated capacity of 529 horsepower. From the intake to where it crosses Assunpink Creek, about six miles, the fall is 14 feet, and from there to the outlet, a distance of one mile, the fall is 4½ feet. This river dam was not authorized by Pennsylvania, and was built in violation of an agreement between the states made April 26, 1783. Its building, therefore, resulted in a controversy, and Pennsylvania ordered its removal. However, it still remains, but they are prevented from keeping it in repair, not being allowed to replace stones that wash away from the parapet. The controversy was precipitated when the Delaware Division Canal Company placed a wing dam in the river at Wells' Falls, to lift water into the canal to supplement its feed water supply below New Hope, and because of the dam which the Delaware & Raritan Canal Company had placed in the river at the head of Bull's Island to supply water by means of its feeder, all the water of which was not turned back into the river, but was discharged mostly in the Raritan River at New Brunswick. The Trenton Delaware Falls water power was, in its early years, a valuable franchise. For many years its stock was owned by Cooper, Hewitt & Company, and the hydraulic power used at their Trenton plants (New Jersey Steel & Iron Co. and Trenton Iron Company). After they disposed of their plants, about 1908, the power company was sold to other parties, and became gradually abandoned, the lower part of the ditch was filled up, and now (1932) the power is not used by any industry, the water being discharged back into the river in the neighborhood of Warren Street. The writer of these notes remembers that on one occasion when the Hon. Abram S. Hewitt came out from New York to visit the Durham Iron Works, he would not cross the river bridge at Riegelsville into Pennsylvania, without first getting an assurance that a summons would not be served on him, in re the removal of this dam; also that he (the writer) was requested to interview the senators and assemblymen of Bucks and Northampton Counties to solicit their support in allowing this dam to be kept in repair. (Hazard's Register, Vol. VIII, pp. 232, 366; Vol. IX, page 119; Vol. X, pp. 119, 121, 161; Vol. XV, pp. 5, 23, 97, 119; History of Burlington and Mercer Counties, page 680.)

1841, rebuilt of same construction and again lost by flood of October 10, 1903. Rebuilt of steel construction and reopened in 1904. Steel bridge, has two trusses with double driveway and a sidewalk on the north side. In 1893 the name of the Yardleyville post office was changed to Yardley, and during the latter part of 1882 the Greensburg, N. J., station of the Pennsylvania Railroad was changed to Wilburtha. Bridge taken over by the Joint Commission, December 21, 1922, at price of \$67,500. Floor rebuilt in 1924, and a sidewalk added on the upstream side in 1928. (For Yardley Ferry, see page 137 ante.)

TAYLORSVILLE DELAWARE BRIDGE COMPANY—From Taylorsville, Bucks County, Pa. (in 1919 changed to Washington Crossing), to Washington Crossing, Mercer County, N. J. Charter granted by New Jersey, February 14, 1831, with concurrent legislation in Pennsylvania, April 1, 1831. Originally a covered bridge of wood construction, with six spans having a total length of 875 feet. Completed and opened for travel January 1, 1834. (Hazard's Register, Vol. XV, page 80.) Carried away by flood of January 8, 1841. Rebuilt and again destroyed by flood of October 10, 1903. Rebuilt of steel construction, two trusses with double driveway, and reopened in 1904. Taken over by the Joint Commission, April 25, 1922, at price of \$40,000, which in 1926, built a sidewalk on the south side.

This bridge occupies the site of McKonkey's Ferry, where General Washington crossed the Delaware on Christmas night of 1776. The two states have authorized the laying out of parks on their respective sides of the river. There is a plan on foot to get an appropriation from congress for building an elaborate memorial bridge at this place. (See page 138, ante.)

NEW HOPE DELAWARE BRIDGE COMPANY—From New Hope, Bucks County, Pa., to Lambertville, N. J. Charter granted by Pennsylvania, December 22, 1812, and by New Jersey, December 23, 1812. Originally a covered bridge of wood construction, having six spans, with a total length of 1,051 feet. Cost, \$67,936.37. Opened for travel, September 13, 1814. Three spans carried away by flood of January 8, 1841, rebuilt after same design. The New Hope end again carried away by flood of October 10, 1903. Rebuilt of steel construction, with double driveway and sidewalk on south side;

reopened, July 23, 1904. The banking privileges granted to this bridge company involved it financially, and for that reason the stockholders were obliged to sell out. John C. Mitchener and James Gordon became the purchasers, who, on November 29, 1853, conveyed it to Samuel Grant, of Philadelphia, who became the sole owner. Its sale was confirmed by the Pennsylvania legislature, February 20, 1857, and by decree of Chancery in New Jersey. After a lapse of 34 years, the bridge with its franchises, were conveyed to a number of persons, part of whom represented the original stockholders. Taken over by the Joint Commission December 31, 1919, at price of \$225,000. (For Coryell's Ferry, see page 141, ante.)

(Battles' History of Bucks County, page 529; Day's Historical Collections of Pennsylvania, pp. 168, 169; and Pamphlet Laws of Pennsylvania for 1857, page 59.)

CENTRE BRIDGE COMPANY—From Centre Bridge, Bucks County, Pa., to what, since 1851, has been Stockton, Hunterdon County, N. J. Charter granted by New Jersey, February 18, 1811, and by Pennsylvania, March 23, 1811. Letters patent to receive subscriptions, August 17, 1812. Originally a covered bridge of wood construction, with six spans and a total length of 821 feet. Built under contract, dated February 22, 1818, by Capt. Pelig Kingsley and Benjamin Lord. Opened for travel in the spring of 1814. The construction was faulty and the contractors were penalized \$1,200. One of the piers soon gave way and had to be rebuilt, and sixteen years later, in 1830, the entire bridge was rebuilt by Amos Campbell under contract. At that time the Raritan feeder on the New Jersey side, and the Delaware Division canal on the Pennsylvania side had not been dug. At first the canal companies built and maintained the bridges over their respective ditches, but, in 1851, the bridge company took over the one crossing the Delaware Division canal. The flood of January 8, 1841, carried away three spans, two piers and the stone toll-house all on the New Jersey side. Repairs were made by Cortland Yardley for \$4,200. The flood of June 6, 1862, did but very little damage to the bridge, and it was the only bridge on the river between Easton and Trenton, that was not damaged by the flood of October 10, 1903. Notwithstanding these facts, this bridge had one of the most checkered careers of all Delaware River bridges. On May 26, 1923, it was slightly

damaged by fire; and again damaged by fire, July 19, 1923, and on July 22, 1923, was struck by lightning and totally destroyed. An act by the Pennsylvania legislature, approved April 10, 1852, authorized the Plymouth Railroad Company to build a railroad from the limestone quarries of Solebury across this bridge to connect with the Raritan Feeder and the Belvidere Delaware Railroad, but the road was not built.²⁸ On November 6, 1925, the stone toll-house, piers and approaches were sold to the Joint Commission for the sum of \$10,000. The piers and abutments were then repaired and a bridge of steel construction erected thereon, having a double driveway and a footwalk on the south side, and a 63-foot plate girder span over the Raritan Feeder, all at a cost of \$258,135, exclusive of the old piers, toll-house, etc. This new bridge was opened for travel, July 16, 1927. (For ferry, see page 143, ante.)

(History of Old Centre Bridge, by Elmer Roberson; History of Hunterdon and Somerset Counties, page 385; History of Bucks County, by Davis, Vol. I, page 288; Day's Historical Collections of Pennsylvania, page 169; Pamphlet Laws of Pennsylvania for 1836 and 1852.)

LUMBERVILLE DELAWARE BRIDGE COMPANY—From Lumberville, Bucks County, Pa., to what is now Raven Rock, Hunterdon County, N. J., but formerly called Bull's Island. About 1785 the site of Lumberville was owned by Col. George Wall, Jr., and William Hamilton, and was known as Wall's Sawmill and Wall's Landing as late as 1814, when the name was changed to Lumberville. The river bridge was chartered by the New Jersey legislature in 1835, and by Pennsylvania, April 7, 1835. A supplemental charter of March 31, 1857, exempted persons going to or returning from church from paying toll. Originally a covered bridge of wood construction, having four spans over the river and a shorter span over the canal, with a total length of 705 feet. The bridge consists of two trusses, a combination of truss and low arch construction, with double driveway and footwalks, built under contract by Solon Chapin and Anthony Fry at cost of \$18,000. Opened for travel in 1835. The second span on the Pennsylvania side was carried away by the flood of

²⁸ The Plymouth Railroad Company was incorporated June 11, 1836, authorized to build a road in Whitemarsh Township, Montgomery County, near the road dividing the townships of Plymouth and Whitemarsh, terminating at a point on the Philadelphia & Germantown Railroad. Since December 9, 1867, it has been operated by the Philadelphia & Reading Railroad Company.

October 10, 1903, and rebuilt of steel construction, the other spans of wooden construction remaining. Immediately above this bridge, at the head of Bull's Island, there is a dam in the Delaware to impound the water flowing into the Delaware & Raritan Canal Feeder.²⁹ Agreement pending by the Joint Commission for taking over this bridge at price of \$25,000. (For ferry, see page 145, ante.)

In 1883 the Lumberton Granite Company (owned by the Kembles, of Philadelphia) erected a tramway over the canal and river from their stone quarry, located about one mile below the Lumberton bridge, for shipment of their product by the Pennsylvania Railroad. Immediately opposite the quarry in New Jersey the railroad company had put in a siding to accommodate a number of cars, which were loaded direct from the quarry. The tramway was equipped with a heavy steel wire cable on which the carriers traveled, propelled by a small endless steel rope, controlled by a stationary engine on the Pennsylvania side. The platform carriers had a capacity of about two tons. It continued in use until 1904, when the quarry was shut down. The writer of these notes and Mrs. Fackenthal, had the delightful experience of making a round trip over the river and back on one of the platform carriers of this tramway.

(History of Bucks County, by Davis, Vol. I, pp. 11, 286, 311.)

POINT PLEASANT DELAWARE BRIDGE COMPANY—From Point Pleasant, Bucks County, Pa., to what is now Byram, Hunterdon County, N. J., but then also called Point Pleasant. Charter granted by Pennsylvania, February 9, 1853, and by New Jersey during the same year. Opened for travel, May 26, 1855. Originally a covered bridge of wood construction, of five spans, having a total length of 895 feet. Capital authorized, \$20,000, of which but \$16,350 was subscribed. Built under contract by Hood & Steel. Damaged by flood of June 6, 1862, and an assessment of \$5 per share made to repair it. Totally destroyed by fire, March 29, 1892. Rebuilt of steel construction about 1893. The four spans nearest New Jersey were carried away by the flood of October 10, 1903, and were rebuilt of steel construction about 1904. This bridge is located immediately above the mouth of Tohickon Creek. Taken over by the Joint Com-

²⁹ See the Delaware and Raritan Canal, page 208 hereof.

mission, January 6, 1919, at price of \$30,000. (For ferry, see page 145, ante.)

("Early History of Point Pleasant," by Warren S. Ely, a paper read at the Point Pleasant Meeting, September 10, 1927, to be published in Vol. VI of the Bucks County Historical Society.)

ALEXANDRIA DELAWARE BRIDGE COMPANY—From Uhler-town, Bucks County, Pa., to Frenchtown, N. J. Chartered by New Jersey, March 5, 1841, and by Pennsylvania, May 8, 1841, with a supplement by both states on March 5, 1845. Opened for travel early part of 1844. Originally a covered bridge of wood construction, with six spans, and two trusses, there was no middle truss. Its length was 962 feet, and its cost about \$20,000. The original bridge continued in use until the flood of October 10, 1903, which carried away the two spans on the New Jersey end; these were replaced by two spans of steel truss construction. Taken over June 28, 1929, by the Joint Commission at price of \$45,000. During the summer of 1931 this old bridge was replaced by a new steel truss bridge on the old foundations. The new bridge was completed and opened for travel October 10, 1931; it has a double driveway and a footwalk on the north side. The total cost of removing the old bridge, extensive repairs to piers and abutments and the new superstructure was \$91,510.87. (For Frenchtown Ferry, see page 146, ante.)

MILFORD DELAWARE BRIDGE COMPANY—From Upper Blacks Eddy, Bucks County, Pa., to Milford, Hunterdon County, N. J. Chartered by New Jersey, March 8, 1839, and by Pennsylvania, June 24, 1839. Opened for travel, January 29, 1842. A covered bridge of wood construction, of three spans, having a total length of 681 feet. Built after the Theodore Burr design with arch and truss combined. Three trusses, with single driveways and sidewalk on each side. Capitalized at \$20,000, original cost about \$18,500, of which but \$13,400 had been subscribed; the balance was paid out of the earnings. Span next to New Jersey carried away by flood of October 10, 1903. Rebuilt after same design, using some of the timbers salvaged from the Riegelsville bridge. This is one of the two bridges on the Delaware remaining with all spans covered. Taken over by the Joint Commission June 28, 1929, at price of \$45,000. This bridge and

the Frenchtown bridge, taken over and declared free of tolls on the same day, was made the occasion of a gala day celebration, attended by dignitaries of the states, officers of the Joint Bridge Commission, and invited guests, with an automobile parade, brass bands and speeches.

By act of the Pennsylvania legislature, April 10, 1869, the Passaic Valley & Peapack Railroad Company was authorized to construct a railroad bridge or viaduct across the Delaware River at or near Milford, N. J., but the project did not materialize. (For Milford, N. J., Ferry, see page 147, ante.)

(Laws of Pennsylvania for 1869, page 825.)

RIEGELSVILLE DELAWARE BRIDGE COMPANY—From Riegelsville, Bucks County, Pa., to Riegelsville, Warren County, N. J.³⁰ Charter granted by New Jersey, December 19, 1835, and by Pennsylvania, March 22, 1836. Opened for travel, December 15, 1837. Originally a covered bridge of wood construction, of three spans, having a total length between abutments of 577 feet. Three trusses with two driveways and sidewalks, built after the Burr design with truss and arch combined. Constructed under contract by Solon Chapin and Hon. James M. Porter for \$18,900. Capital stock authorized, \$20,000, of which but \$18,900 was issued. Span nearest New Jersey carried away by flood of January 8, 1841, rebuilt of same design by same contractors at cost of \$9,000, paid for by a stock assessment. Two spans nearest New Jersey carried away by flood of October 10, 1903, and span nearest Pennsylvania damaged and fell down later. Replaced by a steel wire rope suspension bridge (built by Roebling) 585 feet between center pins of trusses. A double driveway with two sidewalks. Total cost, including repairs to piers and abutments, \$29,072.25. Paid for by increasing capital stock to \$40,000 and using surplus. Reopened for travel, April 18, 1904. Taken over by Joint Commission, January 4, 1923, at price of \$50,000. Declared free on and after January 1, 1923. (For ferry, see page 152, ante.)

EASTON DELAWARE BRIDGE COMPANY—From Easton, Pa., to Phillipsburg, N. J. Charter granted by Pennsylvania, March

³⁰ Riegelsville, N. J., is partly in Warren and partly in Hunterdon Counties, separated by the Musconetcong Creek, which empties into the Delaware River, forming the boundary line between the two counties. The river bridge is on the Warren County side of the creek.

13, 1795, and by New Jersey, March 18, 1795. Enabling act, March 1, 1800. Supplemental charters, March 12, 1802, extending time for completion for an additional seven years. Opened for travel, October 14, 1806. A three-span covered bridge originally of wood construction, 550 feet in length. It was designed and constructed under the supervision of Cyrus Palmer of Newberryport, Massachusetts. The design was of arch and truss combined, but unlike most of the other bridges on the river, it had but two trusses, with double driveways and two sidewalks. Its total cost was \$62,854.57. The long delay (eleven years) in completing this bridge was due to lack of funds, but it turned out to be one of the best paying bridges on the river. To get sufficient funds for its completion the Pennsylvania legislature authorized, by act of April 4, 1798, the raising of \$12,500 by a lottery scheme, and by act of March 10, 1806, the state loaned them \$10,000 in order to put it under roof. A supplemental act by Pennsylvania, approved April 1, 1845, reduced the rate of tolls. By act of April 8, 1859, the Auditor General and Treasurer of Pennsylvania were directed to audit the accounts. In 1895 this bridge was replaced by a steel construction cantilever bridge, designed by Prof. James Madison Porter (the third). These bridges were not damaged by any of the floods, due partly to their location above the mouth of the Lehigh River, which, owing to the breaking of the dams in the Lehigh, was the principal aggressor in 1841 and 1862. However, the History of Sussex and Warren Counties, page 551, says that while under construction the first bridge was washed from its foundation, that may refer to the false work only. Taken over by the Joint Commission, August 3, 1921, at price of \$300,000, in addition to which they divided a large surplus. In the fall of 1925 and summer of 1926, the cantilever anchorages were replaced at a cost of \$26,400, and the floor rebuilt at cost of \$100,400. (For ferry, see page 155, ante.)

(Statutes at Large of Pennsylvania, Vol. XV, page 236; Vol. XVI, pp. 109, 426; Vol. XVII, page 88, and Vol. XVIII, page 141; 3 Smith's Laws, page 200; Pamphlet Laws of Pennsylvania for 1845, page 289, for 1859, page 424; History of Northampton County, page 156; History of the Lehigh Valley, by Henry, page 120; Sherman Day's Historical Collections, page 168.)

BELVIDERE DELAWARE BRIDGE COMPANY—From Riverton, Northampton County, Pa., to Belvidere, Warren County, N. J. Located immediately above the mouth of the Pequest Creek. Charter granted by New Jersey, March 5, 1832, and by Pennsyl-

vania, February 11, 1835, with supplementary charters granted by New Jersey, February 6, 1835, and by Pennsylvania, April 1, 1836. Originally a covered bridge of wood construction, having four spans with a total length of 654 feet. First opened for travel in the spring of 1836, and immediately thereafter, viz., on April 9, 1836, the two spans nearest New Jersey were carried away by a flood. Rebuilt after the same design and reopened in 1839. The bridge was carried away by the flood of October 10, 1903. Rebuilt of steel construction and reopened in 1904. Taken over by the Joint Commission, June 14, 1929, at price of \$60,000. (For Belvidere Ferry, see page 161, ante.)

(Pamphlet Laws of Pennsylvania for 1833, page 25, and for 1836, page 348.)

KNOWLTON TURNPIKE & BRIDGE COMPANY—Crossing the Delaware from Mount Bethel Township, Northampton County, Pa. (about two miles south of Portland) to Delaware, Warren County, N. J. Originally a railroad bridge of wood construction, built in 1853 by the Warren Railroad Company, which later became part of the Delaware, Lackawanna & Western. After some years it was replaced with a bridge of iron construction, having three trusses with provision for double tracks. There are five spans having a total length of 734 feet. In 1914 the railroad company built a new and heavier bridge a few rods higher up the river, crossing obliquely, in order to overcome a short curve on the Pennsylvania end. On completion of the new bridge, they sold the old one to Dr. Henry Darlington, who converted it into a toll bridge, and, in turn, transferred it to the Knowlton Turnpike & Bridge Company, chartered in New Jersey, January 18, 1915, since which time it has been a passenger toll bridge. Taken over by the Joint Commission, February 18, 1932, at price of \$275,000.

COLUMBIA DELAWARE BRIDGE COMPANY—From Portland, Northampton County, Pa., to Columbia, Warren County, N. J. Portland was formerly called Dill's Ferry, where a ferry had been established in 1780. It was incorporated into a borough, October 21, 1876. A river bridge company was first incorporated by "The President, Managers & Company at the Columbia Glass Manufactory," by the New Jersey legislature, February 5, 1816, with concurrent legislation by Pennsylvania, March 16, 1816, but a financial panic nipped the enterprise in the bud. Supple-

mental charters, extending the time for building a bridge, were granted, March 29, 1824, and February 7, 1832, but the bridge was not built. A charter was then granted to the Columbia Delaware Bridge Company, by New Jersey, March 7, 1839, and by Pennsylvania, June 24, 1839. Work on its erection was then begun. The piers and abutments were completed during 1839, when work was suspended and not resumed until 1868, when the bridge was completed and opened for travel in 1869. Its cost was about \$40,000, of which \$37,500 was paid out of its capital stock subscriptions. The original bridge, still standing, is a covered bridge of wood construction, with four spans having a total length of 775 feet. There are two trusses, arch and truss combined, with a double driveway, no sidewalks. It is one of the two bridges remaining on the Delaware, with all spans of covered wood construction. Taken over by the Joint Commission, May 2, 1927, at price of \$50,250. (For Portland Ferry, see page 161, ante.)

(History of Sussex and Warren Counties, page 630, and History of Northampton County, page 253.)

DINGMAN'S CHOICE & DELAWARE BRIDGE COMPANY—Successor to a ferry established about 1735. From Dingman's Ferry, Pike County, Pa., to Layton, Sussex County, N. J. Charter for a bridge granted by Pennsylvania, February 11, 1834, and during the same year by New Jersey. Supplemental charter, February 27, 1849. Originally a three-span covered bridge of wood construction, 541 feet in length. Opened for travel in 1834. Lost by a flood. Rebuilt and again lost by a wind storm. Bridge sold in 1864, sale confirmed by act of Pennsylvania legislature. A third bridge was then built, which broke down in 1869. Ferry service resumed from 1869 to 1900, when the present and fourth bridge was built of steel construction, with two outside trusses, double driveway, no sidewalks. Negotiations pending with the Joint Commission for taking it over. (For Dingman's Ferry, see page 165, ante.)

PRESIDENT, MANAGERS & COMPANY FOR ERECTING A BRIDGE OVER THE DELAWARE RIVER, NEAR MILFORD, PA.—Crossing about one mile below Milford, Pike County, Pa., to Montague Township, Sussex County, N. J. First incorporated by Pennsylvania, March 12, 1804, but bridge not built at that time. A

second charter was granted by New Jersey, January 27, 1814, concurrent legislation by Pennsylvania, March 28, 1814, with supplemental acts of March 29, 1823; March 22, 1825, and January 29, 1850. Originally a three-span covered bridge of wood construction, 531 feet long. Opened for travel in 1836. Damaged by the flood of January 8, 1841. Failed entirely in 1846. Rebuilt in 1869. Lost by flood of 1888. Rebuilt in 1889 of iron construction, having three spans, two outside trusses, double driveway, no sidewalks. Ferry operations were resumed while bridge was out of commission. Taken over by the Joint Commission, April 25, 1922, at price of \$31,500. (For Milford, Pa., Ferry, see page 166, ante.)

(Statutes at Large of Pennsylvania, Vol. XVII, page 688.)

TWENTIETH CENTURY TOLL BRIDGES OVER THE DELAWARE RIVER

It is a coincidence worthy of note, that while the Joint Commission for Eliminating Toll Bridges over the Delaware River is engaged in taking over all the old interstate toll bridges, and freeing them of toll, that millions of dollars are being expended in building other toll bridges; however, all of the new ones are below tide. Three of these new bridges have been completed and opened for travel, as shown on the following list. Two other crossings are being discussed, one for a bridge below Philadelphia and touching the New Jersey shore below Pennsburg; if the War Department will not permit this to be built, vehicular tunnels may be constructed. The other is for vehicular tunnels between New Castle County, Delaware, and Salem County, N. J., a bill for which is now (1932) before Congress.

PHILADELPHIA-CAMDEN DELAWARE RIVER BRIDGE—A toll bridge built and owned by the states of New Jersey and Pennsylvania and the city of Philadelphia. Work began January 6, 1922, and on July 1, 1926, the bridge was opened for travel. A steel wire rope cable suspension bridge resting on concrete foundations. Its total cost was \$37,196,971, of which \$10,000,000 was for land, and \$2,000,000 for engineering and administration expenses. Its total length from Franklin Square, Philadelphia, to Sixth and Penn Streets, Camden, is 1.81 miles. The cables

are 36 inches in diameter, with a clearance of 135 feet above mean high tide. Owing to expansion and contraction between the hottest day in summer and the coldest day in winter, the difference in clearance above the river varies three feet and six inches. The towers are 385 feet high. The river span is 1,750 feet long, and when built was the second longest span of any bridge in the world, exceeded only by the bridge over the St. Lawrence near Quebec, which is 100 feet longer.

Since the Philadelphia-Camden bridge was opened, two other bridges, with longer spans, have been completed, viz., the Ambassador bridge between Detroit, Mich., and Sandwich, Ontario, 1,850 feet, and the George Washington suspension bridge over the Hudson River between Fort Washington, N. Y., and Fort Lee, N. J., with a clear span of 3,500 feet. Opened October 24, 1931.

TACONY-PALMYRA DELAWARE RIVER BRIDGE—An interstate toll bridge of steel construction, resting on concrete foundations, crossing the Delaware between Tacony, Philadelphia, and Palmyra in New Jersey. The approach on the Pennsylvania side is 1,298 feet long and that on the New Jersey side 1,692 feet; the river spans are 2,313 feet, making the total length of the superstructure 5,255 feet. The main span is 540 feet long. A double-leaf bascule adjoining the main span on the east is set on piers giving a clear opening of 240 feet. The roadway is 38 feet wide to accommodate four lanes of traffic. There are foot-paths on both sides. Construction was begun March 27, 1928, and the bridge was opened for travel August 14, 1929. Its cost was about \$5,000,000. This bridge is a private enterprise, with its stock listed on the Philadelphia stock exchange.

BRISTOL-BURLINGTON DELAWARE RIVER BRIDGE—The plans for this bridge were made in 1928, and approved by the War Department, but owing to some delay work was not begun until a year later. This is an interstate bridge of steel construction, resting on concrete foundations. It is located at Maple Beach about one mile below Bristol, Pa., and enters Burlington, N. J., at Reed Street. The total length of superstructure, including the approaches, is 3,144 feet. The roadway accommodates two lanes of traffic with a foot-path for pedestrians. The bridge is equipped with a vertical bascule draw over a channel span of 540

feet, having a clearance above the river when closed of 64 feet and when open of 135 feet. This is the largest vertical draw in the world. This bridge is a private enterprise and is said to have cost \$2,000,000, of which \$100,000 was the cost of the highway feeder at West Burlington, N. J. This bridge was officially opened for travel May 2, 1931, with special ceremonies, speeches and a parade.

RIVER BRIDGES AND FERRIES ON THE DELAWARE RIVER BETWEEN PENNSYLVANIA AND NEW YORK

The Delaware River and its tributaries, above Port Jervis, N. Y., wind their way through the valleys of the Kittatinny and Pocono Mountains of Wayne and Pike Counties, Pa., and of the Catskill Mountains of Delaware, Sullivan and Orange Counties of New York. Geologically the rocks on both sides of the river all belong to the Catskill series. Many beds of flagstones were made available when the Erie Railroad was built through the Delaware Valley. Their quarrying and shipping became an important industry, but alas, the use of cement has closed every one of the quarries. Throughout this entire region, almost to the tops of the highest mountain peaks, there are evidences of the great northern ice glacier.

The country through which the river passes is sparsely settled, consisting mostly of rough mountainous forests. It is recorded that during the active days of rafting, fifty million feet of logs per year were cut from these forests and floated down the Delaware. There are many lakes and mountain streams, well stocked with trout, and the entire section furnishes a delightful playground. During the summer season, the many resorts, mostly small, offer restful retreats for vacation outings. There are but few settlements along the river, except where the bridges are located, all of which are doubtless successors to ferries, and it is not likely that there were many ferries located between them. At any rate, no special effort has been made to locate the old ferries. There was, however, a ferry called Dunning's Ferry, about two miles above Port Jervis, and about nine miles below Pond Eddy bridge; also Minard's Ferry, in Manchester Township, Wayne County, crossing the river about one mile west of Lordville, to connect with the public road on the New York

side in Sullivan County, for which a charter was granted to Zillar Minard by the Pennsylvania legislature, April 14, 1869. Also a wire rope ferry crossing the river at Stockport, about four miles below Hancock. There were also many ferries and bridges on both branches of the Delaware above Hancock.

The distance from Port Jervis to the northern boundary of Pennsylvania, following the windings of the river, is about 85 miles.³¹ There are eleven highway bridges over the Delaware between these two points, which have been taken over by the New York and Pennsylvania Joint Interstate Commission. The bridges are located in the order which follows, beginning at Port Jervis, thence up the river ending with the bridge at Hancock. Charters were granted for two other bridges, which do not appear to have been built. One of them to the "President, Managers & Company of the Bridge at Stockport"—Incorporated by Pennsylvania, March 18, 1816, with a supplementary act of March 29, 1849. Stockport (Hancock post office) is in Wayne County, and a crossing would be at Stockport station on the Erie Railroad in Sullivan County, N. Y. The other one incorporated as the "Delaware Bridge Company," by act of the Pennsylvania legislature, approved April 11, 1866, "to cross the Delaware from a point in Wayne County to be fixed by the corporation, to Fremont Township, Sullivan County, N. Y." The Erie Railroad also crosses the Delaware from New York to Pennsylvania and back again on double track deck truss bridges of steel construction, but these are referred to elsewhere in these notes; see page 193 hereof.

(Hazard's Register, Vol. III, pp. 89, 102; 6 Smith's Laws, 1816, page 354, and Pamphlet Laws of Pennsylvania, 1849, page 196, and for 1866, page 1198.)

PORT JERVIS BRIDGES—From Matamoras, Pike County, Pa., to Port Jervis, Orange County, N. Y. The building of these bridges had rather a unique history, due partly to bad faith,

³¹ The northern boundary line between Pennsylvania and New York was determined in December, 1774, by David Rittenhouse and Samuel Holland, engineers representing both states, who placed a stone marker on a small island in the Mohocks or West Branch of the Delaware, with the letters "New York, 1774," cut on the north side and "Lat. 42° 20'" cut on top thereof. In 1854, the Commissioners of Wayne County erected a granite marker 600 feet west of the middle of the river, at a point about one mile from Hale Eddy, N. Y., to indicate the boundary between the two states. (Hazard's Register, Vol. III, page 135, and Day's Historical Collections of Pennsylvania, page 679.)

deceptions, disappointments and delays. In 1848, a charter was granted by the Pennsylvania legislature to the Milford & Port Jervis Railroad Company, for a bridge over the river to cross between Matamoras and Port Jervis, to be built by the New York, Lake Erie & Western Railroad Company, which had planned to cross the Delaware at that place with its trunk line, but the alignment was changed, and they found it more to their advantage to cross at Sawmill Rift, about four miles above Port Jervis.³² However, in view of their obligation to build and maintain a railroad and wagon bridge between Matamoras and Port Jervis, they carried out their obligation and built a wooden truss bridge which was opened in 1852. In 1870, when plans were about completed to build a railroad to Milford, a wind storm, during March, 1870, completely destroyed the bridge. The Erie Railroad then sold the franchise to the Lamonte Mining & Railroad Company, which had been incorporated by act of the Pennsylvania legislature for the purpose of mining and proved to be an unreliable concern. During the same year the legislature of Pennsylvania passed an act by which the Erie Railroad was to pay the bridge company \$10,000 a year for 990 years, but, alas, owing to dissensions among the bridge directors, the act was repealed, thus relieving the Erie Railroad from all obligations. The franchise was then sold to the Barrett Bridge Company, a New York corporation, which built a new bridge, lower down the river where the present highway bridge stands, but not a combination bridge suitable for both wagons and a railroad, but a two-span wire suspension wagon bridge, on which tolls were exacted. This bridge was carried away by an ice freshet in 1875 and then rebuilt. It was again destroyed by the great flood of October, 1903, after which the present two-span steel arch truss bridge was built. This bridge was taken over by the Pennsylvania-New York Joint Commission for eliminating toll bridges on March 23, 1922, at a price of \$153,250. The commission then expended \$45,026.32 for strengthening and repairing.

When building of the Milford & Port Jervis Railroad was renewed, a bridge was erected over the Delaware a short distance above the Port Jervis bridge, then a toll bridge, and extended to

³² Port Jervis (originally called Mohackamack Fork) was named for John B. Jervis, one of the engineers who built the Delaware and Hudson Canal. It was incorporated into a village, July 20, 1853.

the bluffs of marcellus shale below Matamoras, considerable of which was shipped over the Erie Railroad to New York harbor points. This bridge withstood the flood of 1903, but the following year in 1904 it was carried away by an ice freshet, whereupon it was abandoned. A plate girder span over the Erie tracks and a naked pier standing in the middle of the river can still be seen, sentinels of an unsuccessful undertaking.

POND EDDY BRIDGE—From Pond Eddy, Pike County, Pa., to Pond Eddy (in canal times called Carpenter's basin), Lumberland Township, Sullivan County, N. Y. Originally a wire rope suspension toll bridge, built and maintained by the township of Lumberland. Carried away by the flood of October, 1903, and replaced in 1904 by a two-span bridge of steel construction, and then made a free bridge. Being a free bridge the Joint Commission declined to take it over at its market value. It appears, however, that the township was glad to get rid of its upkeep, and therefore transferred it to the commission, June 24, 1927, for the nominal consideration of \$3.00.

SHOHOLA BRIDGE—From Shohola, Pike County, Pa., to Barryville, Sullivan County, N. Y. A two-span wire rope suspension bridge, first bridge built in 1855, which blew down July 2, 1859. Rebuilt and again blew down, January, 1865. The present bridge of same construction (wire rope suspension) was built during the fall of 1866. Taken over by the Joint Commission, January 27, 1923, at price of \$22,789.11.

(History of Wayne, Pike and Monroe Counties, page 968.)

LACKAWAXEN BRIDGE—This crossing between Lackawaxen, Pike County, Pa., to Minisink Fork, Sullivan County, N. Y. (about a mile and a half from where the battle of Minisink was fought, July 22, 1779), consists of a viaduct having four spans, suspended by a wire rope cable $8\frac{1}{2}$ inches in diameter, formerly used as an aqueduct by the Delaware & Hudson Canal Company. After the canal was abandoned, it was sold in 1899, and the aqueduct converted by Spruks Brothers, lumbermen, of Scranton, Pa., into a viaduct toll bridge, using the bed of the canal as the driveway. Taken over by the Joint Commission, December, 1928, at price of \$20,000. It was about five miles below the junction of the Lackawaxen and Delaware Rivers near

Shohola Creek that the line of survey of the unjust Indian walk of September, 1737, ended. (See Canals, page 194 hereof.)

NARROWSBURG BRIDGE—From Damascus Township, Wayne County, Pa., to Narrowsburg, Sullivan County, N. Y. The first bridge was of wood construction. Replaced by a one-span bridge of steel construction, having a length of about 160 feet. The river at this place passes between two rock embankments, which serve for the abutments of the bridge. This is the shortest bridge on the entire river. Narrowsburg is sometimes referred to as Big Pond. Bridge taken over by the Joint Commission, January 6, 1926, at price of \$55,000.

(History of Wayne, Pike and Monroe Counties, page 330, and Second Geological Survey of Pennsylvania, Vol. C5, page 164.)

MILANVILLE BRIDGE COMPANY—Bridge spans the river from Milanville, Damascus Township, Wayne County, Pa., to Skinner's Falls, Sullivan County, N. Y. A two-span bridge of steel construction. Incorporated, May 8, 1901, with supplemental act of May 26, 1903. It was from this place that the first raft was started down the Delaware in 1764;³³ by Daniel Skinner, after which he was called "Lord High Admiral," a title he retained until his death in 1813. The bridge was taken over by the Joint Commission, April 13, 1923, at price of \$19,542.21.

(History of Wayne, Pike and Monroe Counties, pp. 337 and 445; Laws of Pennsylvania for 1901, page 144, and for 1903, page 68.)

COCHECTON BRIDGE COMPANY—From Damascus, Wayne County, Pa., to Cochection, Sullivan County, N. Y. The first bridge, probably the successor of an early ferry, was chartered in 1817 and completed in 1819. It was a two-span wooden bridge with a pier in the middle. Its construction was so defective that it soon fell of its own weight. In 1821 a second bridge, with three spans, and two piers, was opened and then became regularly incorporated as a toll bridge. In 1846 the western pier became undermined during high water, and fell, carrying with it the two spans on the Pennsylvania side. A legalized ferry was then put in service and operated until the winter of 1847-48, when a new bridge was opened for travel, but this also proved defective and collapsed in the spring of 1848,

³³ Some historians give this date as 1746, particularly Davis in his History of Bucks County, both editions, which is wrong, as 1764 is doubtless the correct date.

when the New York span fell. A new pier and a new span were then built and the bridge reopened in 1849-50. In 1850 the Pennsylvania span gave way. Ferry operations were again resumed until 1854, when a new bridge was opened, which stood until the great ice flood of 1857, when the entire bridge was swept away. The ferry was then equipped with a wire rope cable and again put in service, until February 1, 1859, when another new bridge was opened. In 1872 the middle span settled, requiring repairs. This bridge still standing is of iron construction, with three spans and has a length of about 550 feet. Taken over by the Joint Commission, January 13, 1923, at price of \$24,951.58.

(History of Wayne, Pike and Monroe Counties, pages 377, 468, 469, 470.)

CALLICOON BRIDGE—From Damascus Township, Wayne County, Pa., to Callicoon, Sullivan County, N. Y. A four-span bridge of iron construction, which may have been the successor of an earlier bridge. At any rate, there was a ferry on the river at this place authorized by act of the Pennsylvania legislature, April 13, 1854. Bridge taken over by the Joint Commission, February 9, 1923, at price of \$35,000.

(Laws of Pennsylvania for 1854, page 350.)

KELLAM'S BRIDGE—From Stalker, Manchester Township, Wayne County, Pa., to a road leading to Hankins, Sullivan County, N. Y. A one-span wire rope cable bridge. It appears that there was a ferry on the river at or near this place, granted to William T. Kellam by act of the Pennsylvania legislature, March 28, 1860, "to a point nearly opposite to the Basket switch or depot of the New York, Lake Erie & Western Railroad." Taken over by the Joint Commission, December, 1928, at price of \$15,000.

(Laws of Pennsylvania for 1860, page 319.)

LORDVILLE & EQUINUNK BRIDGE COMPANY—Crossing the river from a point below Equinunk, Manchester Township, Wayne County, Pa., to Lordville, Sullivan County, N. Y. Incorporated by act of Pennsylvania legislature, April 8, 1857, with supplementary act of February 18, 1869. A one-span wire rope cable bridge, about 360 feet long. Taken over by the Joint Commission, April 10, 1930, at price of \$26,002.00.

(History of Wayne, Pike and Monroe Counties, page 536; Laws of Pennsylvania for 1857, page 185, and for 1869, page 189.)

HANCOCK BRIDGE—From Buckingham Township, Wayne County, Pa., to Hancock, Delaware County, N. Y. A one-span wire suspension bridge over the Mohocks or West Branch of the Delaware. Taken over by the Joint Commission, July 1, 1922, at price of \$10,186.76. There is also a highway bridge immediately south of Hancock, crossing the East Branch of the Delaware, and another over the West Branch above the New York state line, but they are wholly within the state of New York, and therefore not interstate bridges.

RAILROAD BRIDGES OVER THE DELAWARE RIVER

There are thirteen railroad bridges spanning the Delaware River between Philadelphia, Pa., and Hancock, N. Y.

PENNSYLVANIA RAILROAD COMPANY—That company's all-rail route to New Jersey seashore points. Crossing the Delaware at Frankford, Philadelphia, Pa. Chartered, March 17, 1890, as the Delaware River Railroad & Bridge Company. Opened for traffic in 1896. Total length of bridge and approaches, 4,375 feet, made up of an approach viaduct at the Pennsylvania end of 41 spans of deck plate girders having an aggregate length of 2,129 feet; three spans, through trusses, each 533 feet, with a draw span of 328 feet, and an approach on the New Jersey side of eight spans of deck plate girders having a total length of 324 feet. Constructed of steel.

PENNSYLVANIA RAILROAD COMPANY—Crossing the Delaware between Morrisville, Bucks County, Pa., and Trenton, N. J. The through line of that company's entire system of railroads into and through New Jersey to New York. A stone arch bridge, having 18 spans, of which four are for the approaches and fourteen spanning the channel. Opened for traffic in 1908. This bridge was built to replace a steel bridge three-tenths of a mile higher up the river at Decatur Street. For data of the first bridge, see page 169, ante.

DELAWARE & BOUND BROOK RAILROAD COMPANY—The Philadelphia & Reading Railroad Company, lessees. Crossing the Delaware between Yardley, Bucks County, Pa., and North Trenton, N. J. A concrete arch bridge, having 14 spans, of

which twelve are over the stream and one on each side of the river for approaches. Built in 1893 to replace a bridge of steel construction, which had six spans, one of which was over the public road, which had been opened for traffic, May 1, 1876.

LEHIGH VALLEY RAILROAD COMPANY—Chartered, September 20, 1847. Its railroad from Mauch Chunk to South Easton was completed by September 24, 1855. In 1856 a wooden bridge of unique design was erected over the Delaware to Phillipsburg, N. J. This was a double bridge, with one set of tracks supported by the bottom chords, crossing the river on an incline to connect at grade with the Belvidere Delaware Railroad. The other set of tracks were on top of the trusses and crossed on a level to meet the tracks of the Central Railroad of New Jersey at grade. In 1866 an enlarged bridge, to the south thereof, of wood construction, was completed. It was equipped with stiffening arches on new masonry and had double tracks. In 1868 a new connection was effected with the Belvidere Delaware. In 1875 the Easton & Amboy Railroad, affiliated with the Lehigh Valley, was completed between Phillipsburg and Jersey City, when a new bridge of iron construction was built with double tracks, having four spans built on a curve, involving a three-span single track spur to connect with the Central Railroad of New Jersey and the Morris & Essex Division of the D. L. & W. Railroad. The old wooden bridge was then removed. A cut of it in process of removal can be seen in Condit's History of Easton, page 459. In 1901-02 a new double-track steel bridge was added, using the masonry up-stream. It has seven spans of a total length of 1,077 feet, with a spur bridge of three spans having a total length of 270 feet connecting with the Central of New Jersey and Morris & Essex Railroads. At the same time the iron bridge, built in 1875, was changed to a single track and shortened one span at the New Jersey end. Thus giving them two bridges with three tracks, which are now (1932) in use.

CENTRAL RAILROAD COMPANY OF NEW JERSEY—Incorporated February 26, 1847, as the Somerville & Easton Railroad Company; changed on April 23, 1849, to that of Central Railroad Company of New Jersey. The road was completed and opened to Phillipsburg, N. J., in 1852, which is the terminus of that branch of its system. In 1855 the Lehigh Valley Rail-

road was opened from Mauch Chunk to Easton, and in 1856 that road built a bridge of wooden construction over the Delaware, having two sets of tracks one above the other. The top or upper tracks connected with the Central Railroad of New Jersey, the lower ones with the Belvidere Delaware Railroad, which had been completed to Phillipsburg in 1854. The Lehigh & Susquehanna Railroad, organized in 1837, a subsidiary of the Lehigh Coal & Navigation Company, began grading its road between Mauch Chunk and Easton in 1866, completing it by May 2, 1868. The tracks were laid throughout with Bessemer steel rails weighing sixty pounds to the yard, imported from England, and was one of the first railroads in this country to use steel rails. Some of these rails still remain on abandoned side tracks bearing the stamp of "John Brown, Sheffield Atlas Steel, 1867"; "Bolton Iron & Steel Co., Naylor & Co., 1867," and "Cam-mell Sheffield—Toughened Steel, 1867." Their cost appears to have been about \$185 per ton. It was not until 1893, that the Lehigh & Susquehanna built a bridge of its own across the Delaware. In 1903 it was replaced by a bridge of iron construction, which was followed in 1920 by the present bridge of steel construction, having seven spans, with a total length of 1,036 feet 4 inches, which includes the approaches at both ends. There are but four spans over the stream.

LEHIGH & HUDSON RIVER RAILROAD COMPANY—Incorporated under the laws of both New Jersey and New York. The road was completed to Belvidere, N. J., by 1890, which for several years was its western terminal. Crosses the Hudson River over the Poughkeepsie bridge. A survey was made to extend the road from Belvidere to Phillipsburg, but this plan was abandoned by reason of an agreement with the Pennsylvania Railroad Company to use the tracks of the Belvidere Division Railroad. At Phillipsburg connection was made with the tracks of the Central Railroad, which operated the road from Belvidere until 1896, when the Lehigh & Hudson built its own bridge over the Delaware, using the Central passenger station at the foot of Fourth Street, Easton, for its terminal. This bridge crosses the Delaware on a curve, and also on a grade, dropping from the level of the Central tracks at Easton to those of the Pennsylvania near its Phillipsburg passenger station. The bridge is of steel con-

struction, mostly of plate girders with thirteen spans, of which six are over the stream and the others over the approaches.

PENNSYLVANIA RAILROAD COMPANY—Crossing the Delaware from Brainards, Warren County, N. J., to Martins Creek, Northampton County, Pa. The first bridge of wood construction was opened for traffic in 1885. The superstructure was carried away by the flood of October 10, 1903. Rebuilt of steel construction in 1904. Wood trestle approach on the New Jersey side 63 feet long, then two spans of deck plate girders each 53 feet, four spans of same each $92\frac{1}{2}$ feet and one span $88\frac{1}{2}$ feet long, making the total length of the bridge and approaches, 627 feet 6 inches.

DELAWARE, LACKAWANNA & WESTERN RAILROAD COMPANY. The construction of this road has a most interesting history. It was the outgrowth of the Lackawanna Coal & Iron Company, with a plant at Scranton and its valuable coal mines, and of the Oxford Iron Company, which desired to find an outlet for its products. The railroad is a consolidation of a number of roads, chartered under different names: First, the Owego & Ithaca, opened December, 1849; second, the Susquehanna Canal & Railroad Company, chartered 1826, succeeded by the Lackawanna & Western running from Scranton to Great Bend, completed in October, 1851, and called the Legget's Gap Railroad. The Warren Railroad Company of New Jersey, incorporated April 23, 1852, which provides, "That it shall be lawful for the said Warren Railroad Company to erect a bridge across the Delaware at some point near or within five miles of the Delaware Water Gap." On the same day (April 23, 1852) a charter was granted to the Delaware & Cobbs Creek Railroad, with the proviso: "That it shall be lawful for the Delaware & Cobbs Creek Railroad to connect their road with the road of the Warren Railroad Company of New Jersey, by a bridge across the river Delaware, which bridge may be constructed jointly, or in part, or whole by either company aforementioned * * *" All of which were consolidated March 11, 1853, as the Delaware, Lackawanna & Western Railroad Company. The Morris & Essex Railroad was later taken over by the same company.

A river bridge, of wood construction, was accordingly built by the Warren Railroad Company in 1853. It crosses the Dela-

ware about two miles south of Portland, Northampton County, Pa., to Delaware, Warren County, N. J. Later this wooden bridge was replaced by a bridge of iron construction, having three trusses and a double passageway, five spans having a total length of 734 feet. This bridge proved to be unsatisfactory, owing to the short curve at the Pennsylvania end, and in 1914 a new and much stronger bridge of steel construction was built a few rods higher up the river. When the new bridge was opened in 1915, the railroad company sold the old one to Dr. Henry Darlington on behalf of the Knowlton Turnpike & Bridge Company, and until February 18, 1932, it was maintained as a toll bridge. See page 161, ante.

(History of Sussex and Warren Counties, page 656, et seq.; History of Wayne, Pike and Monroe Counties, pp. 1031, 1032, and Laws of Pennsylvania for 1852, page 422.)

LEHIGH & NEW ENGLAND RAILROAD COMPANY—Originally the Pennsylvania, Slatington & New England Railroad Company, which was reorganized in 1887 as the Pennsylvania, Poughkeepsie & Boston Railroad Company, which, in turn, was foreclosed in 1904, and then taken over by the Lehigh & New England Railroad Company, which had been chartered, April 2, 1895. The road was opened for traffic from Slatington, Pa., to Campbells Hall, N. Y., January 1, 1890. A bridge crosses the Delaware River from Portland, Pa., to Columbia, Warren County, N. J. The bridge has one plate deck girder span over the D. L. & W. Railroad tracks, then five spans of similar construction over the river, then a number of spans of same construction for a long approach on the New Jersey side.

DELAWARE, LACKAWANNA & WESTERN RAILROAD COMPANY. A beautifully designed concrete bridge over the Delaware River, located at a point between Portland, Pa., and the Delaware Water Gap. It has a long concrete approach on the New Jersey side, then six arch spans over the river, then with concrete bridges over the low-down tracks of the same railroad company and over the public roads. This bridge was opened for traffic, December 24, 1911, when the Jersey City cutoff was put in service. The railroad company calls the Pennsylvania end, Slateford Junction. The New Jersey end is in Knowlton Township, Warren County.

NEW YORK, SUSQUEHANNA & WESTERN RAILROAD COMPANY—Incorporated in Pennsylvania, April 25, 1893. Leased by the New York, Lake Erie & Western Railroad Co., now the Erie Railroad Co.

Bridge constructed about 1881-82, under a charter granted to the North New Jersey Railroad Company in New Jersey and the Water Gap Railroad Co., in Pennsylvania.

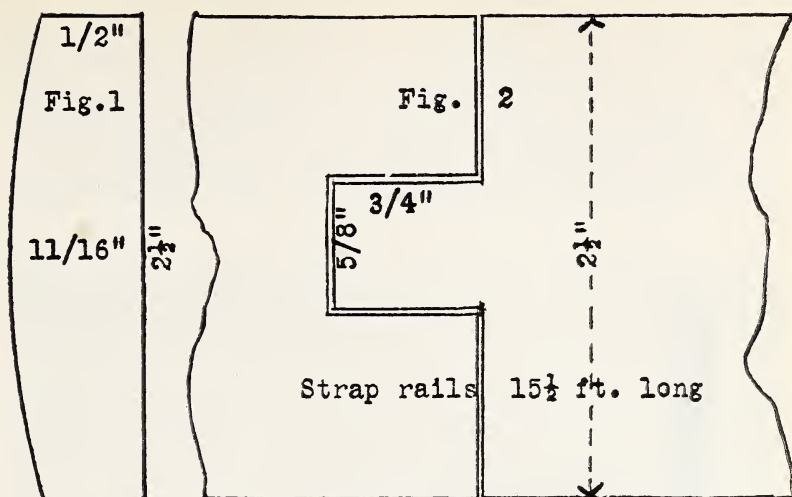
This bridge crosses the Delaware at their Water Gap station, between Delaware Water Gap and Shawnee, in Smithfield Township, Monroe County, to Pahaquarry Township, Warren County, N. J. It is built of iron with four spans, single track, 884 feet 3 inches between abutments.

ERIE RAILROAD COMPANY—Formerly the New York, Lake Erie & Western Railroad. Two double-track deck truss bridges of iron or steel construction, about 27 miles apart, cross the Delaware above Port Jervis. The railroad follows the eastern or New York shore to Mill Rift at Old Bolton Basin, about four miles above Port Jervis, where it crosses the river and canal into Pike County, Pa. This bridge was carried away by an ice freshet in 1875, as was also the toll bridge at Port Jervis. From Mill Creek the railroad follows the western or Pennsylvania shore for about 27 miles, and then crosses back into New York over a three span bridge at Tusin Station, about a mile above the village of Tusin in Sullivan County, and about eight miles above Lackawaxen. Just below Hancock the railroad crosses over the East Branch of the Delaware, but that is wholly within the state of New York and not an interstate bridge.

CANALS CONNECTED WITH THE WATERS OF
THE DELAWARE AND LEHIGH RIVERS

DELAWARE & HUDSON CANAL—There were five canals built and operated in connection with the waters of the Delaware and Lehigh Rivers, of which the Delaware & Hudson was the pioneer and the first to open for navigation.

On March 13, 1823, the Pennsylvania legislature authorized the improvement of navigation on the Lackawaxen River, in order that the anthracite coal mines of Wurts Brothers, located at Carbondale in Lackawanna County, operating under the name of Lackawaxen Coal Mine and Navigation Company, might be developed, and the coal carried to market. This franchise with its coal mines and transportation rights was then sold to the Lackawaxen Canal Company, organized March 9, 1825, with Philip Hone as its first president. On May 1, 1826, it was incorporated by act of the Pennsylvania legislature. On April 23, 1823, the Delaware & Hudson Railroad had been chartered by the Pennsylvania legislature. The charter rights were then transferred to The President, Managers & Company of the Delaware & Hudson Canal Company, which had, on April 23, 1823, been incorporated under the laws of New York, empowered to open water communication between the Delaware and Hudson Rivers. A gravity road with eight inclined planes was then built from the coal mines at Carbondale, over the Moosic Mountain to the junction of the Lackawaxen and Dyberry Rivers at Honesdale. The mines were on the west side of the mountain, which the road ascended by means of five planes, each having an ascent of from 120 feet to 205 feet, operated by five stationary engines, crossing the mountain through Rix's Gap, then descending on the eastern slope by three gravity planes, controlled by self-acting windlasses. Its total length was nearly 17 miles, with Rix's Gap 970 feet above the canal basin at Honesdale. The gauge of the tracks was 4 feet 3 inches, supported on hemlock stringers, 8 inches by 16 inches, set on edge, on which the iron strap rails were fastened with countersunk screws. The rails, made in England, were about $15\frac{1}{2}$ feet long, size $2\frac{1}{2}$ inches by $\frac{1}{2}$ inch, with rounded tops, and the ends dovetailed together as shown by the following cut:



DELAWARE & HUDSON CANAL COMPANY

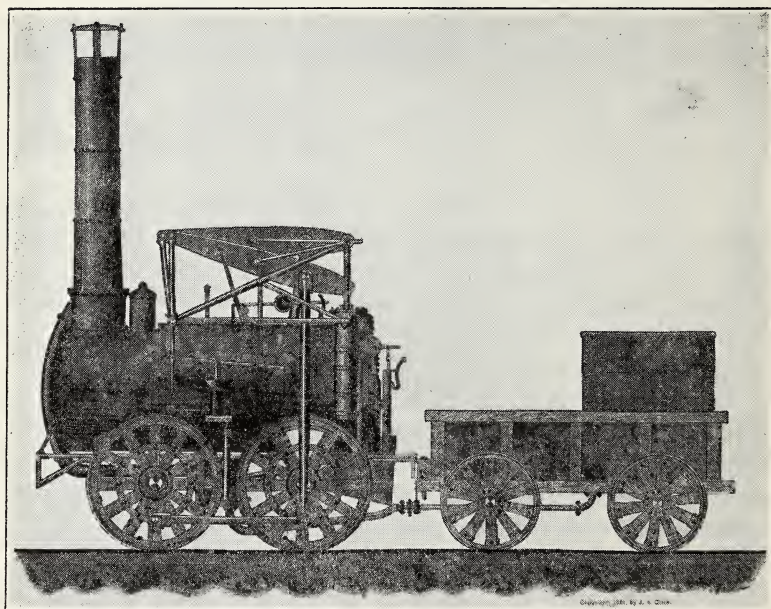
Fig. 1. Full size section of rounded top strap rails used on inclined plane railroad.

Fig. 2. Top view. Full size, showing how rails were joined together at ends.

The planes were, at first, equipped with chains (made in England), which proved troublesome, owing to frequent breakage, and in a few years were discarded and replaced by tarred manilla ropes, and still later, after wire ropes were made in this country, probably in 1846, iron wire ropes were installed.

On August 8, 1829, a locomotive built by Foster, Rastrick & Co., of Stourbridge, England, and called the "Stourbridge Lion," was imported and put in service on this gravity road. Its cost delivered at Rondout was \$2,914.90. It was the very first locomotive engine to be used on any American railroad. The greater part of it has since been reassembled and can now be seen in the Smithsonian Institute at Washington. It was the plan of the Delaware & Hudson Canal Company to use locomotives on the three descending stretches of tracks which were, respectively, two, six and four miles in length, and with that end in view ordered and had delivered three locomotives. However, the experimental trials with the "Stourbridge Lion" were not satisfactory, due to the hemlock stringers not having sufficient cross ties, and were not considered safe for this "heavy locomotive," weighing eight tons, and the plan was given up. This

was, however, the beginning of locomotives in America, the evolution and growth of which can be seen by the thousands now in use, as well as by the size and economic construction of the twentieth century locomotives. The two illustrations shown herewith demonstrate the changes that have taken place in a century from the "Stourbridge Lion" to the "High-Pressure



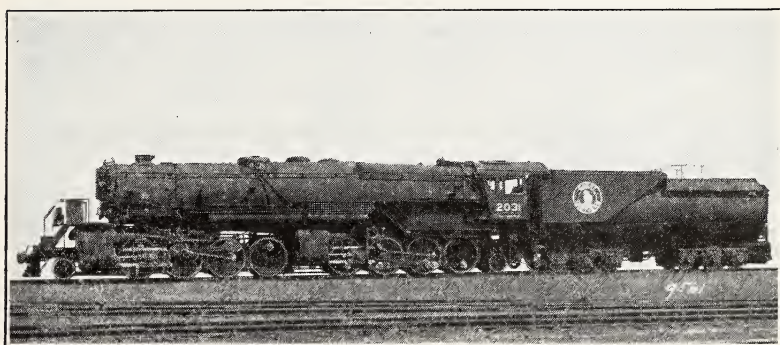
THE "STOURBRIDGE LION" LOCOMOTIVE ENGINE

The first locomotive engine ever used in America. Made in England and imported by the Delaware & Hudson Canal Company. Put in service, August 8, 1829, on their inclined plane railway at Honestdale, Pennsylvania. Height to top of stack, 15 feet.

Wheel base, 4 feet 6 inches. Two upright cylinders, $8\frac{3}{4}$ in. diameter, 36 in. stroke. Four driving wheels, 48 in. diameter, with wooden spokes and felloes. Weight fully equipped, eight net tons.

Articular Locomotive," using oil as fuel, built at the Baldwin shops for the Great Northern Railway Company, weighing with tender over 458 net tons, and having a total length of 105 feet. In like manner the same progress has been made in rails from those of strap iron to those of the steel T rails, weighing 136 pounds per yard, now being rolled at the Steelton plant of the

Bethlehem Steel Corporation for the Lehigh Valley Railroad.³⁴ The T rail was the invention of Robert L. Stevens, who, in 1831, induced a firm in Wales to roll iron rails from his pattern, with which to equip the Camden & Amboy Railroad, of which he was president. The first shipment arrived in America May 16, 1831, they were 16 feet long, $3\frac{1}{2}$ inches high by $3\frac{1}{4}$ inches at the base, and weighed slightly less than 40 pounds per yard. Rails having the standard length of 30 feet were first rolled at the Cambria Iron Works, Johnstown, Pa., in 1855. The first experimental Bessemer steel rail was rolled in England in 1857,



HIGH-PRESSURE ARTICULATED OIL BURNING FREIGHT LOCOMOTIVE

Built in 1925 at The Baldwin Locomotive Works for the Great Northern Railway.

Total length of locomotive and tender, 105 ft. Engine has 12 driving wheels,

63 in. diameter, with wheel base of 58 ft. 2 in. Tender has 12 wheels,

33 in. diameter. Two sets (4) engine truck wheels, 33 in. diameter.

Weight fully equipped, $458\frac{1}{2}$ net tons.

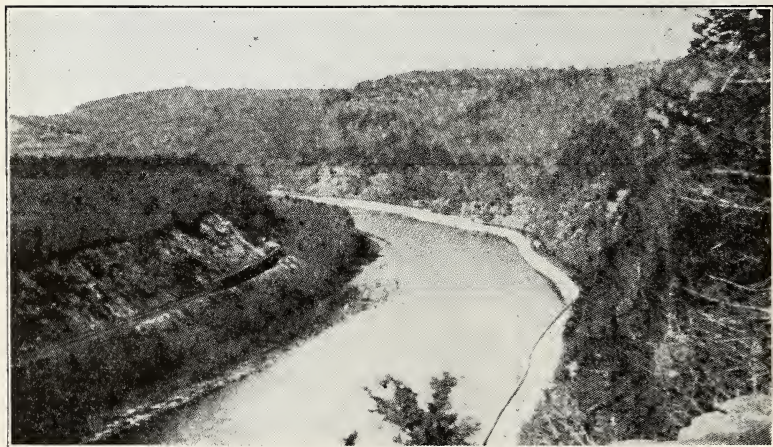
and the first one in the United States on May 24, 1865, at the North Chicago rolling mills. With all this evolution, development and expansion of our railroads and their motive power, the flanges on the wheels of both locomotives and cars have undergone but little change.

From the basin at Honesdale, where the coal chutes were located, the canal followed along the northern side of the Lackawaxen River, descending 371 feet, with 37 locks, in a distance of about 26 miles, where it crossed the Lackawaxen, and then,

³⁴ Since this paper was first written, we learn that the Pennsylvania Railroad Co., during May, 1931, began laying steel rails weighing 152 pounds per yard. They were rolled at the Steelton plant of the Bethlehem Steel Co., and the Edgar Thompson plant of the United States Steel Corporation.

when first built, on a dam in the Delaware River, with outlet locks on both sides thereof. Owing to the uncertain conditions of water in the Delaware, the crossing on a dam was found to be unsatisfactory. After the establishment of a wire rope plant in this country, by John A. Roebling at Saxenberg, Butler County, Pa., the construction of an aqueduct, suspended by wire rope cables, was begun, which was completed and put in service in 1849. These cables were the third cables made in this country. Their diameter was $8\frac{1}{2}$ inches. The aqueduct had four spans, having a total length of 550 feet. The waterway between the trusses was of wood construction. The canal was formally abandoned February 23, 1899, and on June 13th following, the canal was sold to the Cornell Steamboat Company, which, in turn, sold the bridge to Spruiks Brothers, of Scranton, Pa., who converted it into a highway toll bridge, the bed on the aqueduct serving as the roadway for the viaduct.

After crossing the Delaware at Lackawaxen, the canal followed along the eastern shore of the Delaware to Port Jervis, a distance of 22 miles, with 22 locks, thence along the Neversink River, $8\frac{1}{2}$ miles to Cuddebackville, where it crossed over the Neversink by an aqueduct 324 feet long, thence through the



DELAWARE RIVER ABOVE PORT JERVIS

Showing Delaware & Hudson Canal beneath Hawk's Nest, about four miles above Port Jervis on the New York side of the river and the Erie Railroad on the Pennsylvania side of the Delaware.

Rondout Valley, crossing the Rondout River by a stone arch aqueduct supported by two arches, to the basin at Eddyville on the Hudson River, two miles from Rondout, now part of Kingston, formerly called Esopus, a distance of 59 miles with 60 locks, from Port Jervis, making the total length of the canal about 108 miles.

The gravity road was the first undertaking of that kind in America. Prior to its construction coal was hauled from the mines by wagons and sleds to the Lackawaxen and its tributaries and floated on arks down to the Philadelphia and other markets. The first boat, carrying 10 tons of coal, passed through the canal during October, 1828, whereas the gravity road did not begin delivering coal until October 9, 1829, during this intervening year carting by team to Honesdale continued.

The prism of the canal, as well as the locks, were enlarged from time to time, first to accommodate boats carrying 30 to 40 tons, then in 1841 to carry 40 to 50 tons, and again in 1849, when the aqueduct was completed, to carry 135 tons. Until the incline plane road was ready, the canal shipments were made up mostly of wood and lumber. During one week in May, 1829, 110 boats and 106 rafts of lumber arrived at Eddyville. The last boat was cleared through the canal, November 5, 1898, thus making the life of the canal seventy years.

In May, 1850, a gravity railroad was completed by the Pennsylvania Coal Company from its mines at Dunmore and Pittston in Lackawanna County, to the D. & H. canal basin at Hawley, and for several years its anthracite coal was transported by that canal. This gravity road extended over the Moosic Mountains, and was, in fact, a double road, with one set of tracks for carrying down loaded cars, the other for empty cars returning to the mines. This pioneer venture of the Delaware & Hudson Company, turned out *per se* to be a paying venture, but on the abandonment of the system, the capital investment was naturally lost. It was, however, the beginning of the Delaware & Hudson Company, with its railroads, coal mines, ore mines, blast furnace, hotels and other property. In October, 1930, the Delaware & Hudson Railroad Company petitioned the Interstate Commerce Commission for permission to abandon that part of the road still in use, saying that it was being operated less and less in recent years. Their petition was granted, and on August 3,

1931, authorized its abandonment. The building of the incline gravity road and the canal were indeed bold undertakings, which deserve the applause of all progressive Americans, and now, alas, in this twentieth century, the railroads owning coal mines, are compelled to segregate them from their carrying systems.

(History of Wayne, Pike and Monroe Counties, by Alfred Mathews, 1886, pp. 227 and 237 to 244; "Old Towpaths," by Alvin F. Harlow, page 185, D. Appleton & Co., 1926; Hazard's Register, Vol. III, page 139, Vol. VI, page 111, Vol. VII, page 45; Swank's Iron in All Ages, second edition, pp. 437, 438, 439; "A Century of Progress," being a History of the Delaware and Hudson Company.)

LEHIGH CANAL—Owned and operated by the Lehigh Coal & Navigation Company, successor of the Lehigh Coal Mine Company, organized February 13, 1792, which not being successful in its operations, was dissolved. It was followed by the Lehigh Navigation Company, organized August 10, 1818, and the Lehigh Coal Company, organized October 21, 1818, which were united to form the Lehigh Coal & Navigation Company, which originated under "an act to improve navigation in the river Lehigh," granted to Josiah White, Erskine Hazard and George F. A. Hauto on March 18, 1818. Owing to some friction among the partners, Hauto on March 7, 1820, agreed to sell out his interest to his associates. On February 13, 1822, a liberal and broad charter was granted to them, with exclusive rights to the use of the waters of the Lehigh, and with authority to build canals from its coal mines to Easton, where the Lehigh empties into the Delaware.³⁵ The work of digging the canal did not begin until they had assurance that the Delaware Division Canal would be built. About the same time they began building a gravity railroad from their coal mines to connect with the canal. This was completed by May, 1827. This was later called the Switch Back Railroad, and used exclusively by tourists and for pleasure excursions. The first section of the canal from Mauch Chunk to Easton, $46\frac{3}{4}$ miles, was partly by slack water, requiring nine dams together with 37 locks to overcome a fall of 364 feet. This section was opened in June, 1829, but could not be used to advantage, as the Delaware Division Canal, with which it was to connect at Easton, was not completed. The Morris canal in New Jersey with which it was to connect at Easton, was not opened until the spring of 1832. Therefore,

³⁵ See Hazard's Register, Vol. XIII, page 229.

shipments of coal by arks down the Delaware River continued. It was not until 1832 that the Delaware Division Canal was opened, and then it was found to be so defective that it took until 1834 before navigation could be regularly carried on. The second section of the Lehigh Canal, from Mauch Chunk to White Haven, $24\frac{3}{4}$ miles, almost entirely by slack water, had a fall of 642 feet, overcome by 29 locks with falls of from 15 to 30 feet.³⁶ This section was opened in 1838, and three years later, in January, 1841, was completely destroyed by a flood. It was rebuilt along more substantial lines, and again put in commission in 1844. The third section from Wright's creek at White Haven to Stoddartsville, 12,296 miles, with a fall of 336 feet, 3 locks and 3 dams, was opened for navigation March 19, 1838. On completion of this third section the entire canal had a total length of 83.80 miles with a fall of 1,342 feet. I have often heard my old friend, John Brown (born 1808, died 1889), when as superintendent in charge of building this canal above Mauch Chunk, relate his experience and the great difficulties to be overcome in building through a pioneer country, with no sign of human habitation between Lausanne and Stoddartsville, a distance of 35 miles, and how he spent many nights sleeping under the hemlocks, with hemlock boughs for his bed.

The great flood of June, 1862, completely destroyed the canal above Mauch Chunk, washing away all the dams and locks, as well as destroying many of those between Easton and Mauch Chunk. The canal above Mauch Chunk was then abandoned, and the terminus of the canal re-established at Mauch Chunk, where it had been prior to 1838, and where coal was transferred to boats down in 1923, when, owing to freshets having washed coal culm into the river and canal, the terminus was established at Slate Dam, two miles above Siegfried, about twenty miles below Mauch Chunk. The culm salvaged from the dams above Siegfried in 1927 amounted to 160,148 gross tons, all of which was shipped to the Palmerton, Pa., plant of the New Jersey Zinc Company. We are told that when canal navigation was at its peak there were from 2,500 to 3,000 boats on these canals, whereas there are now (1928) but 78, of which 72 are "company" boats, six belonging to individuals. Of the 72 company boats, 40 are employed in boating culm recovered by the dredges above

³⁶ See Hazard's Register, Vol. XVI, page 366.

referred to, and 32 on the canal proper from the present head of navigation at Slate Dam. On the opening of navigation in the spring of 1931, the number of boats plying on these canals had been reduced to twenty. The Lehigh canal and its leased line, the Delaware Division, were for several years the remaining canals in the entire country, which continued to operate with wooden boats propelled by mule power. A few boats are still (1932) operating on the Lehigh between Easton and Slate Dam at Siegfried.

There are about fifteen plants operating on the Lehigh with overflow water, such as: Gristmills, paint-grinding mills, ice plants, foundry facing and pumping plants, with heads and falls ranging between 10 and 18 feet. Also one hydro-electric plant located at South Easton, operating under a head and fall of 21 feet, now part of the Metropolitan Edison Company's system. See also Delaware Division Canal, which is, in fact, part of the Lehigh Canal System.

(Henry's History of the Lehigh Valley, pp. 375, 386, and History of Northampton County, page 160; Hazard's Register, Vol. V, page 348.)

DELAWARE DIVISION OF THE PENNSYLVANIA STATE CANALS. This is one of a number of canals built by the State of Pennsylvania. It was authorized by act of April 9, 1827. Built primarily to connect at Easton with the Lehigh Canal, which has operated it under lease since 1866. The digging began at Bristol, October 28, 1827, and by 1832 some boats were passed through, but the construction was so faulty that it was not until March 1, 1834, that the defects were partly remedied and the canal declared open for navigation. But even then boats could not be loaded to their full capacity. This delay was a great disappointment and entailed a loss to the Lehigh Coal & Navigation Company, which had completed its canal to Easton by 1829.³⁷ The Delaware Division Canal is supplied with feed water from the Lehigh

³⁷ On December 21, 1830, before the defects of construction were remedied, the expenditures amounted to \$1,238,027.69, nearly twice the estimated cost, exclusive of land damages which prior to November 1, 1831, amounted to \$34,262.64. In 1834 the cost of canal alone was reported to have been \$1,430,211.85. On completion of the canal there were 23 lift locks with a fall of 165.05 feet, 3 guard locks, and 2 outlet locks, one at Bristol and one at Easton, 9 aqueducts, 20 culverts, 19 waste wieres, 2 safety gates, 18 lock houses, 2 lock tenders and collectors' houses and 106 bridges. The bridges consisted of 3 turnpike bridges, 47 road bridges, 49 farm bridges and 7 foot bridges. (Official report on file at Harrisburg, Hazard's Register, Vol. V, page 183, Vol. VII, page 24, and Vol. XIII, page 197.)



CANAL BOAT ON DELAWARE DIVISION CANAL

Empty boat moving up stream, showing one of the 106 bridges crossing over the canal.
(Photograph by John A. Anderson.)



DELAWARE DIVISION CANAL, LOCK No. 17

Empty boat leaving "Ridges Lock" opposite Marshall's Island, in Tinicum Township, Bucks County, Pa. (Courtesy of "The Majestic Delaware, the Nation's Foremost Historic River," by Francis Burke Brandt.)

River, where, at Easton, a dam was built under an agreement entered into between the two canal companies on June 18, 1829. This dam was badly constructed, requiring extensive repairs in 1830, and immediately thereafter, during the same year, was destroyed by a flood. Owing partly to bad construction and to the porosity of the soil through which the canal ran, the loss of water was so great that the Lehigh River could not supply enough for passing boats through loaded to their capacity. The engineers, at that time, estimated the requirements to be:

	Cubic Feet
For lockage of 192 boats every 24 hours.....	1,130,496
Evaporation do	106,560
Leakage and Locks do	792,000
Filtration (Seepage) do	43,142,400
Total.....	45,171,456
Equivalent to, cubic feet per minute.....	31,369

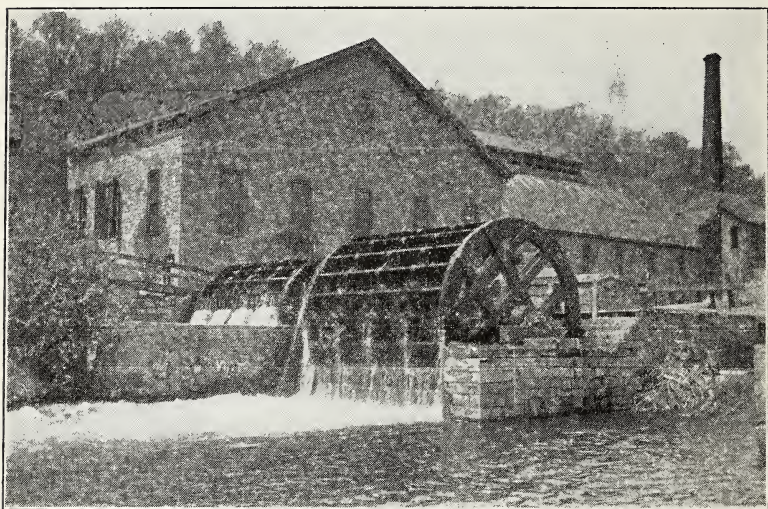
Different schemes were therefore resorted to for providing more water, among which was a dam put in Durham creek and by means of a race or feeder as it was called, 1,890 feet long, some water was supplied from that source, this continued until 1840. Water from twenty-two of the small creeks along the route flow directly into the canal. The largest of these is the Pidcock creek. In 1833 a short wing-wall dam was put in the river at the foot of Wells Falls, about one mile below New Hope, to operate a most ingenious, but simple water wheel, for lifting water from the Delaware into the canal; the engraving shown on opposite page will better show this device.

The wheel with larger circumference is an undershot water wheel propelled by water from the Delaware, which in turn operates the smaller wheel with pockets or buckets to deliver water into the canal. The buildings shown in foreground are part of the Union Paper Mill plant, which also operates partly by water power.

But all these devices did not provide water enough, and with the view of overcoming the difficulty, the Legislature of Pennsylvania by acts of April 10, 1832, and February 8, 1833, authorized the appointment of commissioners, with power to employ engineers to devise some plan for getting more water. They reported on a plan for damming the Delaware at or near Bull's Island, but this was so strenuously opposed by citizens

at public meetings held at Point Pleasant, July 1, 1835, and at New Hope, July 3, 1835, that it was not adopted. (Hazard's Register, Vol. XV, pp. 5-23-47-61.)

As the bed and banks of the canal became more settled and the leakages stopped, the loss of water was greatly reduced, until finally boats could readily pass through carrying 100 tons. In later years additional water was supplied from the sources of the Lehigh River in the Pocono Mountains.



WATER WHEEL INSTALLED IN 1833 AT WELLS FALLS BELOW NEW HOPE, PA., FOR LIFTING WATER INTO THE CANAL

By act of April 21, 1858, the Delaware Division Canal was sold to the Sunbury & Erie Railroad Co. On July 10, 1858, that railroad conveyed it to the Delaware Division Canal Company, which company, in 1866, leased it to the Lehigh Coal & Navigation Company, which continued to operate it down to October 17, 1931, when the greater part of it was taken over by the Commonwealth of Pennsylvania.³⁸ At Easton there is a weigh-lock, also an outlet lock into the Delaware for ferrying boats over to

³⁸ This lease was for 99 years (therefore expiring in 1965), they were to pay the interest on the Delaware Division Canal Company's indebtedness of \$800,000 at 6%, and dividends semi-annually at rate of 4% on the capital stock, of \$1,633,350, together with such expenses, not exceeding \$5,000 per annum, necessary to keep up the organization of the company.

and from the Morris canal at Phillipsburg, N. J. In 1854, an outlet lock was put in about half-a-mile below the New Hope-Lambertville river bridge. The elimination of the Delaware & Raritan Feeder and the Morris Canal dealt heavy blows to the traffic on the Lehigh and Delaware Division Canals, which became still further reduced until the spring of 1931 when but twenty boats remained in operation. On October 17, that part of the canal between Raubsville and Lock No. 5, below Yardley, a distance of about 40 miles, was formally transferred to the Commonwealth of Pennsylvania, and with this transfer this canal, which had served to develop our country over the past 100 years passed into history. The last boat, No. 181, passed north on the canal on the morning of October 17, 1931.

As above noted there are a number of plants operating with overflow water on the Lehigh Canal. There are also two plants similarly operated on the Delaware Division Canal. One at the Ground Hog locks at Raubsville, Northampton County, six miles below Easton, where a hydro-electric plant was installed in 1900. Originally with two units of water, one with a fall of 34 feet, the tail water delivered back into the Delaware River, the other with a fall of 17 feet, the tail water returning to the canal below the locks, for navigation purposes. In 1895 this plant was bought by the Clymer Power Company, of which the writer of these notes was president, and on March 1, 1925, it was sold to the Pennsylvania Power & Light Company, which has since put in new equipment and otherwise enlarged its capacity. Since the abandonment of the canal for navigation purposes the capacity of this plant has been still further increased, as both units can now deliver most of the tail water into the Delaware River. The other plant is at Yardley in Bucks County, established about 1898, where the overflow water operates a gristmill under a 12-foot head.

In 1828 the State of Pennsylvania took into consideration the extension of the Delaware Division Canal from Easton to Port Jervis, N. Y. The engineers completed their survey and estimates of this extension, and reported November 29, 1828. They found the distance from Peter's Rift, about three-quarters of a mile above Carpenter's Point (where a dam was to be erected) to Easton, to be $66\frac{3}{4}$ miles, and the fall to be 262 feet, with an

estimated cost of \$1,430,669.17, but the design was not carried out.

(Hazard's Register, Vol. I, pages 23, 91, 121; Vol. III, page 101; Vol. V, pp. 88, 303; Vol. XIV, page 381.)



VIEW OF THE DELAWARE DIVISION CANAL AND TOWING PATH

Near Riegelsville, Pennsylvania

MORRIS CANAL IN NEW JERSEY—Incorporated in 1824 as the Morris Canal & Banking Company, to build a canal from the mouth of the Lehigh River at Easton to New York tide points. Opened for navigation between Easton and Newark Bay, May 20, 1832, extended to Jersey City in 1836. The length of the water-way with all its windings was 102 miles, whereas by an air line the distance was but 55 miles. The canal was supplied with water by the overflow of Lake Hopatcong, which has an elevation of 914 feet above tide. This lake is on the summit between the terminals of the canal, the water descending from both ends of the lake. Westwardly to the Delaware River at Easton, there is a fall of 760 feet, overcome by eleven planes and seven locks. Boats were ferried over the Delaware between Easton and Phillipsburg by use of an overhead cable

system. There was an outlet lock at Phillipsburg into the river and a similar lock on the Pennsylvania side by means of which boats could cross the river and enter both the Lehigh and Delaware Division Canals. From Lake Hopatcong eastwardly to New York tide there is a fall of 748 feet, with twelve planes and eighteen locks. The water descending in both directions, not only supplied water to carry on navigation, but also for the water wheels which furnished motive power to operate the planes, to carry the boats up and down from one level to another. The average lift of the planes was about 63 feet, with the highest one at Boonton of 80 feet. When first built these planes were equipped with manilla ropes, but later, probably about 1847, iron wire ropes were substituted. These wire ropes were made by John A. Roebling at his plant at Saxonburg, Butler County, Pa. This was the third application of wire rope cables for inclined planes in this country, the first for a plane at Johnstown, Pa.; the second for the old Portage Railroad across the Allegheny Mountains. Mr. Roebling began making wire rope at Saxonburg in 1840, and in 1849 moved his plant to Trenton, N. J. This canal as a transportation company might have been successful financially, but it was handicapped with banking rights, which, with financial speculation, caused it to be an unsuccessful venture. In 1871 the canal was leased to the Lehigh Valley Railroad Company, which wanted to get possession of the property and riparian rights at Jersey City. Owing to railroad competition the revenues gradually declined, and after some litigation, which affected the industries along the course of the Mussonetcong Creek, with overflow water from Lake Hopatcong as its source, the canal was abandoned. On November 29, 1922, the State of New Jersey purchased the property with its franchise for the sum of \$875,000. The Lehigh Valley Railroad Company, retaining title to the big basin at Jersey City and the bed of the canal between Green's Bridge (near Phillipsburg) and the Delaware River. From 1876 to 1898, thousands of tons of iron ore from Cooper & Hewitt's mines at Ringwood, N. J., were transported through this canal to their plant at Durham. The ore was transferred to canal boats at Mountain View, N. J. During later years a few boats continued to operate, but the canal soon

became a stagnant ditch, and in 1924 the State of New Jersey decreed it abandoned.

("Old Towpaths," by Alvin F. Harlow; Communication to the Bulletin of the American Iron & Steel Association, December 4, 1893; History of Sussex and Warren Counties, page 486.)

THE DELAWARE & RARITAN CANAL AND FEEDER—After several abortive attempts, this canal was finally built, as authorized by act of the New Jersey legislature, passed February 4, 1830, it being the fifth act authorizing its building. The work of digging the canal and feeder and of building the dam to supply feed-water were begun in 1832. The Delaware River dam (located at the head of Bull's Island), the feeder and that part of the canal between Trenton and New Brunswick were completed in 1834, but that part between Trenton and Bordentown was not ready until 1838. The dam above Bull's Island extended entirely across the river, with a sluice-way in the middle, but not having been authorized by Pennsylvania, its construction resulted in much controversy between the two states, brought about when the Delaware Division Canal placed a wing-wall dam in the Delaware at Wells' Falls, on the Pennsylvania side, one mile below the New Hope River bridge, to supply additional water for navigation below New Hope. Pennsylvania objected to the Raritan dam placed across the river at the head of Bull's Island, as it took water out of the river that was not returned back into the stream, but was mostly discharged into the Raritan River at New Brunswick, and also because it was objected to by the shad fisheries. And, moreover, it was in violation of an agreement between the two states entered into April 26, 1783. However, it was of the greatest importance that the canals should be supplied with water and the commissioners came to an agreement on November 22, 1834, by which both dams were allowed to remain.

The Raritan feeder not only supplied water to the Delaware & Raritan system, but was itself a navigable canal 22.6 miles in length from the intake at the head of Bull's Island to Trenton, where it unites with the main canal. Navigation on the feeder stopped some years ago, and the ditch is now used only to supply feed water to the main canal; the draw bridges have all been replaced with stationary low down bridges. That part of the main canal between Trenton and New Brunswick, 37.39 miles

in length, is over a route comparatively flat, requiring but 6 locks. That part from Trenton to Bordentown was not completed until 1838. It is 6.27 miles in length, with 7 locks, each having a fall of about eight feet. This extension to Bordentown was by far the most profitable part of the enterprise. It opened up exchange of traffic with the Delaware Division Canal (which had an outlet lock at Bristol) with the Schuylkill and Susquehanna Canals, the Chesapeake & Delaware Canal from the south, as well as with all coastwise vessels to carry coal and other cargo across the state of New Jersey to New York and other tide water points. In 1854 an outlet lock from the feeder at Lambertville was installed to exchange traffic with the Delaware Division Canal, which had built a similar outlet lock $1\frac{1}{4}$ miles below the New Hope River bridge. This provided a much shorter means of exchange than via the outlet locks at Bristol and Bordentown. Boats both loaded and empty were ferried over the Delaware by the same kind of overhead cable system, already described, as were used by the oldtime passenger ferry boats. Thousands of tons of pig iron were shipped by this canal route from the Durham Iron Works to the New Jersey Steel & Iron Company and the Trenton Iron Company, the same people, Cooper, Hewitt & Co., owning the three plants.

At the present time (1932) a few boats, propelled by steam, are still operating on the Bordentown branch, some for pleasure, but mostly for carrying coal from Trenton for delivery to Delaware River tide water points.

(Hazard's Register, Vol. VIII, p. 366, and Vol. XV, pp. 1 to 8, 23, 24, 25, 47, 61, 97; Vol. XVI, page 93; and "Old Towpaths," by Alvin F. Harlow, published by D. Appleton & Co., 1927.)

FLOODS OR FRESHETS IN THE DELAWARE AND
LEHIGH RIVERS

The following data is gathered from many sources, such as county and other histories, Hazard's Registers, Watson's Annals, Historical Collections by Ethan Allen Weaver, files of old newspapers and the family Bible of George Wyker. No mention is made of the usual spring floods or of the other ordinary floods, which occurred every year, and were always welcomed by the raftsmen, but only those of extraordinary heights which did more or less damage to property.

The flood of April 9, 1836, carried away two spans of the Belvidere bridge five months after it was first opened for travel.³⁹

The flood of 1841 damaged many toll bridges, carrying away all or some spans of many, as did also the flood of 1862, while that of October, 1903, carried away all or part of every bridge between Easton and Trenton, except the one between Centre Bridge, Pa., and Stockton, N. J. The flood or freshet of 1903 was the highest on record. The measurements in Durham Township show it to have been 53 inches higher than that of 1841 and 41 inches higher than that of 1862.

THE GEORGE WYKER FAMILY BIBLE

(Copied from an old newspaper clipping, without date.)

At the sale of the personal effects of the late Samuel Wyker, in Tinicum Township, Bucks County, Pa., William Closson, of Point Pleasant, purchased an old Bible which had belonged to George Wyker, father of Samuel. George Wyker died April 1, 1850, in the 84th year of his age. (Therefore born 1767.) Among the records contained in this Bible were the following:

RECORDED FLOODS OF THE DELAWARE RIVER SINCE THE
COUNTRY WAS SETTLED BY WHITE INHABITANTS

Earliest Flood—On the 4th of June, 1734, was the greatest flood in the Delaware since the country was settled (even to this day, 1846), for it covered all the banks from one to five feet deep, and the people had to flee to the hills for safety.

On the 23d of May, 1736, occurred another flood within about

³⁹ History of Sussex and Warren Counties, by James P. Snell, 1881, page 545.

foot as high as the one mentioned above, which caused the settlers to sell out and buy lands away from the river. My grandfather, Henry DeKillian, saw both of these floods.

On the 8th of May, 1781, there was a very high flood in the river. It ran nearly all over Marshall's Island, and they caught shad on Marshall's grain field. This fresh I seen myself. G. W.

On March 16th and 17th, 1784, was the greatest ice fresh ever known in the Delaware, and there has been none since now at this day, 1846, which did so much damage to the shores.

On the 7th day of October, 1786, happened what was called the "Pumpkin fresh," it being the highest flood since 1734 and 1736. G. Wyker.

I have also accounts of many other freshets in the Delaware, which I have recorded, but the flood of the 8th and 9th of January, 1841, exceeded them all, except those of 1734 and 1736, in height of water by 3 or 4 feet. G. Wyker.

On the 15th day of March, 1846, quite a high flood in the river, but not by 2 or 3 feet as high as that of 1841. The above I have written on the 8th day of April, 1846, being now in my 80th year. George Wyker.

(Copied from another page of the same Bible):

On Friday and Saturday, the 8th and 9th of January, 1841, the river Delaware was higher than it had been for 107 years before, for in 1734 it covered what is now called the Erwinna flats or lowlands from one to five feet deep and the inhabitants had to flee to the hills; but this fresh was not by three feet as high, so that the families could stay in their houses, but the fresh carried away four bridges on the Delaware and five on the Lehigh, besides doing a great deal of damage to property of every description; and on the Lehigh it carried away several houses, with all their furniture, and several lives were lost.

George Wyker.

FRESHETS CHRONOLOGICALLY ARRANGED

1687, May 29—History of Bucks County by Gen. Davis, Second Edition, Vol. I, page 62, records: (See also Watson's Annals, Vol. II, page 364, and Historical Collections of New Jersey by Barber & Howe, page 282.) "Among the notable events along the Delaware, was the 'great land

flood and rupture,' May 29, 1687, at the Falls of the Delaware in Falls Township, which was followed by great sickness." This does not seem to have been a flood in the river, but a land flood, accompanied by an upheaval, and is supposed to refer to the separation of Vurhultsen's Island from the main land, on which the Walloon families had settled nearly three-quarters of a century before.

1692, Feb. 27—Smith's History of New Jersey, page 208, published in 1765, records a flood in the Delaware River, and says: "There have been a great many floods since, but none quite so high." Watson's Annals, Vol. II, page 364, says that Phineas Pemberton "speaks of this great flood at the Falls of the Delaware, which rose twelve feet above usual high water mark, owing to the sudden melting of snow. The water reached the upper stories of houses built on low lands." (See also Hazard's Register, Vol. II, page 23.)

1731, Feb. 16—Watson's Annals, Vol. II, page 364, says: "Last week we had the greatest fresh in the Delaware, ever known since the great flood at Delaware Falls, thirty-nine years ago, in 1692." (See also Hazard's Register, Vol. II, page 23.)

1734, June 4—Referred to in family Bible of George Wyker. See page 210, ante. The river rose 20 feet at Trenton. (New Jersey Archives, Vol. XI, page 237.)

1736, May 22—Referred to in family Bible of George Wyker. See page 210, ante.

1739—The Crown Inn, page 128, records that: "In 1739, the treacherous river (Lehigh) suddenly rose, overflowing its banks, sweeping away the cabin of the settler (Ysselstein). So impetuous was the angry flood that the inmates of the doomed home barely escaped with their lives to higher ground. This is the first freshet in the Lehigh on record, it being the one which served as a standard of comparison for Moravian chroniclers of high water in the last century." This flood is also referred to in "History of Bethlehem," page 672.

1744, 1758 and 1772—Three floods are referred to in Hazard's Register, Vol. IX, page 159. It is not definitely stated that these floods reached the Delaware River.

- 1747, Feb. 16-17—"The Crown Inn," pages 21 and 59 to 65, records a freshet on the Lehigh which carried away the ferry-boat at Bethlehem, which had been in use since the ferry was first put in service March 11, 1743. The length of the old boat appears to have been $31\frac{1}{2}$ feet; the new one was made 42 feet. This ferry was granted a patent March 10, 1756.
- 1777, Oct. 27—Delaware, 23 ft. 8 in. at Easton. Weaver's Collections, page 186. The heights reported by Mr. Weaver all appear to have been taken above the mouth of the Lehigh River. All heights reported herein, unless otherwise stated, are those above low water mark.
- 1781, May 9—Delaware, 26 feet at Easton. Weaver, page 186.
- 1783, Feb. 19—Delaware, 24 ft. 11 in. at Easton. Weaver, page 186.
- 1784, Mar. 17—Delaware, 26 ft. 6 in. at Easton. Weaver, page 71. Wyker's Bible calls this an ice freshet.
- 1785, Mar. 17—Delaware, 27 ft. 5 in. at Easton. Weaver, page 186.
- 1786, Oct. 6—Delaware, 25 ft. 8 in. at Easton. Weaver, page 186. 16 ft. at Lambertville. Called the "Pumpkin Freshet." Referred to in History of Bethlehem, page 672, as being a ruinous freshet.
- 1788, "A great freshet," mentioned in the Benjamin Parry papers, also in Davis' History of Bucks County, Vol. II, page 188.
- 1798, From Wyker's Bible, recorded to be "not as high as 1786," but exact height not given.
- 1800, Referred to in Hazard's Register, Vol. IX, page 159. Also referred to in the Benjamin Parry papers.
- 1801, Called "Jefferson Freshet," 14 feet at Lambertville, N. J.
- 1804, Apr. 22 and 23—Watson's Annals, Vol. II, page 365, reports: "A very great fresh in the Delaware and Schuylkill, attended with very high tides, occasioned by very heavy rains."
- 1807, "A great freshet," mentioned in the Benjamin Parry papers.
- 1811, Freshet destroyed the bridge over the Lehigh River at Easton. (Condit's History of Easton, page 465.)

- 1814, Apr. 1—Delaware, 25 ft. at Easton. Weaver, pages 71 and 186. 14 feet at Lambertville, N. J. Also referred to in the Benjamin Parry papers.
- 1814, Aug. 9—Freshet in the Lehigh River referred to in Henry's History of the Lehigh Valley, page 380.
- 1817, August—See Hazard's Register, Vol. IX, page 159, where a flood is referred to.
- 1821, High water in the Lehigh, during the early spring, referred to in Hazard's Register, Vol. VII, page 250.
- 1828, Delaware, 18 feet at Easton. Weaver, page 71.
- 1829, April—Delaware, 18 feet near Easton. Hazard's Register, Vol. III, page 256.
- 1830, Spring flood washed away the Lehigh dam at Easton. (Hazard's Register, Vol. V, page 303.)
- 1831, Jan. 10—Under this date Hazard's Register, Vol. VIII, page 250, reports a freshet of unusual height with water in the Lehigh higher than it has been since 1821.
- 1831, July—Hazard's Register, Vol. VIII, page 62, reports high water in both rivers, saying that it had rained almost continuously for 23 days during March, with a fall of 5.93 inches, and continued to rain over the first ten days of July.
- 1831, Oct. 13—Hazard's Register, Vol. VIII, page 272, reports a flood in the Lehigh and Delaware, but gives no data, except to say that great damage was done.
- 1832, Mar. 13—Delaware, 21 feet at Easton. Weaver, page 71. Lambertville, 12 feet. Also referred to in Hazard's Register, Vol. IX, page 208.
- 1833, June 20—The Doylestown Intelligencer, of June 24, describes a heavy rain with destructive results in Bucks County, and a flood in the Delaware. (Hazard's Register, Vol. XII, page 15.)
- 1836, Apr. 9—Delaware, 25 feet at Easton. (Weaver, pages 71 and 100.) Two spans of Delaware River bridge at Belvidere carried away. Height at Lambertville 14 ft. 6 in.
- 1839, April—Delaware, 14 ft. 6 in. at Lambertville.
- 1840, Nov. 4—Referred to as the great flood of November, 1840. Considerable damage done, particularly in the neighborhood of Easton. (History of Northampton County, page 157.)

- 1841, Jan. 8—This was a most disastrous flood, caused by heavy rains and the ice in the upper waters of the rivers breaking up. The flood at Easton reached a height of 35 feet, at Bull's Island 23 feet, at Lambertville 20 feet. The fall in the Lehigh River between White Haven and Mauch Chunk, a distance of 25 miles, is 642 feet. Navigation in the canal was overcome by 29 locks from 15 feet to 30 feet in depth. Many of these were destroyed by this flood, as were also the sawmills of the canal company. Every bridge on the Lehigh between Lehigh Gap and Easton was carried away, as was also the bridge at Mauch Chunk. (See Henry's History of the Lehigh Valley, page 371; History of Northampton County, page 157, and numerous other records.) Many bridges on the Delaware River were destroyed or damaged. (See newspaper clipping.)
- 1843, Oct. 18—Delaware, 14 feet at Lambertville.
- 1845, Oct. 13—Delaware, 23 ft. 2 in. at Easton. Weaver, page 186. This flood is also referred to by Jonathan Brock in a private letter to Samuel Hart, Esq., dated at Bethlehem, October 17, 1845, in which he says: "The Lehigh was nearly as high on the 13th at White Haven as it was in 1841, but no damage was done (to the canal) above Mauch Chunk. Considerable, however, below. Will be repaired in about ten days.
- 1846, Mar. 15—Delaware, 27 ft. 6 in. at Easton. Weaver, page 186. 17 ft. 6 in. at Lambertville.
- 1849, Aug.—Recollection of Joseph R. Whitaker, who says the Delaware rose so high that the water flooded the hearth of the newly completed Durham blast furnace.
- 1851—William H. Glace, Esq., of Catasauqua, Pa., in a brochure published in 1912, says: "In 1851 there was another large freshet in the Lehigh. The damage was not as great as the flood of 1841."
- 1857, Great flood with ice in upper Delaware. The river bridge at Cochection carried away. (History of Wayne, Pike and Monroe Counties, page 469.)
- 1862, June 6—This was a most disastrous flood, due largely to many of the dams on the Lehigh giving way. The surface of the water in the Delaware at Riegelsville was covered with lumber, logs, houses, barns, pig sties, hay

stacks, bridges, canal and other boats. At Easton the water was 42 feet high. At Durham one foot higher than 1841. All bridges on the Lehigh between Mauch Chunk and Easton were either wholly or partly destroyed. All the locks above Mauch Chunk were washed out, and that part of the canal, between Mauch Chunk and White Haven, was abandoned, and thereafter for some years Mauch Chunk was made the terminus of the canal, where canal boats loaded. Damages to the bridges on the Delaware were very slight.

- 1869, Oct.—Delaware, 23 feet at Easton; 20 feet at Milford, N. J.
- 1875, An ice freshet in the upper Delaware carried away the Erie Railroad bridge at Mill Rift, also the toll bridge at Port Jarvis.
- 1877, "Terrible freshet" in Durham Creek and Gallows Run. Both Durham and Narrows aqueducts carried away.
- 1878, Dec. 11—Flood in Delaware river, rising to within one inch of the threshold of the Fackenthal homestead in Durham township, then occupied by S. B. Redmond. Height of water but 3 or 4 feet lower than freshet of 1841.
- 1881, Feb. 19—Flood in Delaware river. The Bucks County Intelligencer records it to have been most serious in the Penn's Manor section, where the lives of many residents were threatened when the water overflowed the banks. Houses and barns were flooded and many of the smaller buildings swept away from their foundations. Some of the people were forced to flee from their homes by means of boats.
- 1888, Flood in the Delaware carried away the Milford, Pa., river bridge. (See page 166, ante.)
- 1895, Spring—Delaware, 18 feet at Frenchtown, N. J.
- 1901, Dec. 16—The minute-book of the Thomas Iron Co. records a flood in the Lehigh river which greatly interfered with the operations of its blast furnaces at Hokendauqua and Island Park. In the Delaware this flood came within 9 inches of the floor of the New Hope-Lambertville river bridge.
- 1902, Feb. 28—The same minute-book records this flood to have been two feet higher than that of December 16, 1901, com-

elling its blast-furnaces along the Lehigh to be "banked," i. e., the operations temporarily suspended.⁴⁰

1902, Dec.—Called "Ice Freshet," 19 ft. 2 in. at Lambertville.

1903, Oct. 10—Probably the highest flood on record. At Easton, 40 ft. 6 in.; at Lambertville, 24 ft. 9 in. This datum is misleading, and cannot be correct, as this flood was higher than that of 1862. In Durham Township, by actual measurement, it was 41 in. higher than 1862 and 53 in. higher than 1841. This flood, although higher than those of 1841 and 1862, was not so disastrous. The dams and locks on the Lehigh were better protected and the people had learned to build on higher ground, and moreover rafting had ceased and there were no logs or sawed stuff to be carried away, as was the case in 1841 and 1862. However, many bridges on both the Lehigh and Delaware were either wholly or partly destroyed, as recorded elsewhere in this paper.

Variations in heights at different points along the river herein recorded, are due to the river spreading out more over low lands at some places than at others, and for which due allowance should be made.

No attempt has been made to present data of freshets after the great flood of October 10, 1903.

The following data showing the velocity of flow in the Delaware River during the ice freshet of March 20, 1905, furnished by Mr. Alexander P. Gest, at that time superintendent of the Belvidere, Delaware Railroad, is of special interest:

Station	Time	Distance in Miles
Delaware Water Gap.....	9.30 A. M.	
Manunka Chunk.....	10.40 "	10.3
Belvidere.....	11.10 "	13.5
Martin's Creek.....	1.00 P. M.	20.6
Phillipsburg.....	1.30 "	27.5
Riegelsville.....	3.00 "	36.2
Milford.....	4.15 "	43.0
Frenchtown.....	5.20 "	46.5
Raven Rock.....	6.45 "	55.4
Stockton.....	7.55 "	58.6
Lambertville.....	8.20 "	62.0
Washington Crossing.....	9.25 "	68.8
Wilburtha.....	11.15 "	72.5
Trenton.....	12.15 "	78.1

⁴⁰ The author of this paper was president of the Thomas Iron Company from December 19, 1893, to May 1, 1913.

Total time 14 hours 55 minutes. Average velocity about $5\frac{1}{4}$ miles per hour. This table shows great variations in the speed traveled between stations, which was doubtless due to greater fall between some and wider areas at others, where the stream is not contracted, but spreads out over low lands on the banks of the river.

JURISDICTION OF ISLANDS IN THE DELAWARE RIVER

I have not, in this paper, referred to the islands in the Delaware River, and their division and ownership between the states, as I am hoping to prepare a separate paper on that interesting feature, to present to this society at an early day.

I will, however, briefly state that the legislatures of New Jersey and Pennsylvania on April 26, 1783, entered into an agreement by which commissioners were appointed for the purpose of settling the jurisdiction of the Delaware River and the islands, islets and dry lands within the same, "from the station-point or northwestern corner of New Jersey southerly to the place upon said river where the boundary of the State of Delaware toucheth upon the same."

Two sets of commissioners were appointed at different times, but both under the same act. The first to settle the jurisdiction of islands from the Falls of Trenton southerly to the State of Delaware. On this commission New Jersey appointed Abraham Clark,⁴¹ Joseph Cooper and Thomas Henderson and Pennsylvania appointed George Bryan, George Gray and William Bingen. These commissioners made their report in duplicate, one copy for each state. The New Jersey legislature ratified and confirmed the report by act passed May 27, 1783, and Pennsylvania by a similar act on September 20, 1783.

The second commission was appointed for settling the jurisdiction of the islands from the Falls of Trenton, northerly, to the aforesaid station-point (now called Tri-States at Carpenter's Point). On this board there was but one commissioner from New Jersey, viz., Moore Furman, and three from Pennsylvania, viz., George Wall, John Okely and Jonas Hartzell. The reports of these commissioners were ratified and approved by acts of

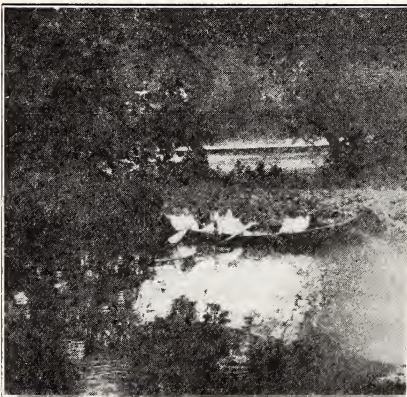
⁴¹ Abraham Clark was a New Jersey signer of the Declaration of Independence.

the legislatures of their respective States, that by New Jersey, March 16, 1786, and by Pennsylvania, September 25, 1786. These reports, enacted into laws, set forth in full detail lists of the islands apportioned to each state, giving them the names by which they were known at that time. Many of the original names have since been changed. Maps of the surveys were made by Reading Howell.

(Laws of New Jersey, pp. 47, 76 and 77, and 2 Smith's Laws of Pennsylvania, pp. 77 and 388.)

Data concerning the islands in the Delaware between Port Jervis and Hancock are somewhat conflicting, doubtless due partly to the names of some of them having been changed. The following is the best list that can be made from the information at hand; it has been gathered from maps of the United States Geological Survey, from Mr. Frank Patterson of Sparrowbush, and from "A Rafting Story of the Delaware," heretofore referred to. They are noted in the order as we proceed up stream:

Cherry Island at Mill Run; Butler Island opposite Hawk's Nest; Montgaup Island near the mouth of Montgaup river; Hogg Island below Cochection; Horse Island below Cochection; Bear Island and its mate, near Callicoon; Ross' Island at Abrahamsville; Frisbees Island at Equinunk; Murray and Apron-string Islands near Hancock. There are many bridges, ferries and fords on both branches of the Delaware above Hancock.



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Hand Organ Notes

By JOSEPH E. SANDFORD, BROOKLYN, N. Y.

(Point Pleasant Meeting, September 10, 1927)

ONE evening, in the fall of 1925, two Italians, a man and a woman, were pulling a street piano through the twilight of Fulton street in Brooklyn, N. Y. The man could speak no English and was plainly frightened when asked where such an instrument could be purchased; the woman understood, and reaching into a box on the front of the cart, brought out a soiled bill-head—from which I copied "Molinari 112 32nd St." Thus began an effort to find a peg-supported barrel-organ to fill one of the gaps in the collection of the Bucks County Historical Society. This was done at Dr. Mercer's request. The following notes were gleaned in connection with this venture:

THE MOLINARI BUSINESS—The business of G. Molinari & Sons was started in 1865, in Broome street, New York, by Joseph Molinari, the grandfather of the present proprietor, Edward Molinari. It is now (1927) housed in a badly weathered brick four-story building, in the Bayridge section of Brooklyn, which at an earlier day was probably a residence. A time-dulled sign says there is an office in Elizabeth street, New York, but that was six or seven years ago, before the moving pictures and phonographs had stolen the children from the hand-organ man. The factory is much too large for the activity which goes on within it, just as a collar seems to a man, once fat and prosperous, now old and shrunken away. The repair of eight or nine hand-organs and about fifteen street pianos, which play in New York, Boston and nearby cities, and the making of the punched-paper music "books" for merry-go-round orchestrions is all there is left to do. There is one competitor, the firm of E. Bona & A. Antoniazzi, manufacturers of Cylinder Pianos and Organs, at 336-338 Water Street, New York.

The organ here discussed is a box-shaped portable wind instrument generally carried on the back or shoulder of a way-faring man, usually an Italian, and well known, forty years ago, as the "Organ Grinder," earning his living by playing the instrument to entertain people, chiefly children, for a petty fee.

Because of its mode of operation, support, size, added attractions, musical quality and, above all, its unseen mechanism, it was variously named, as:

(a) Hand organ—because it was always played by turning a hand-crank.

(b) Monkey organ—because a poor little rope-fast monkey was carried about with it to amuse children.

(c) Puppet organ—because its mechanism sometimes made puppets dance.

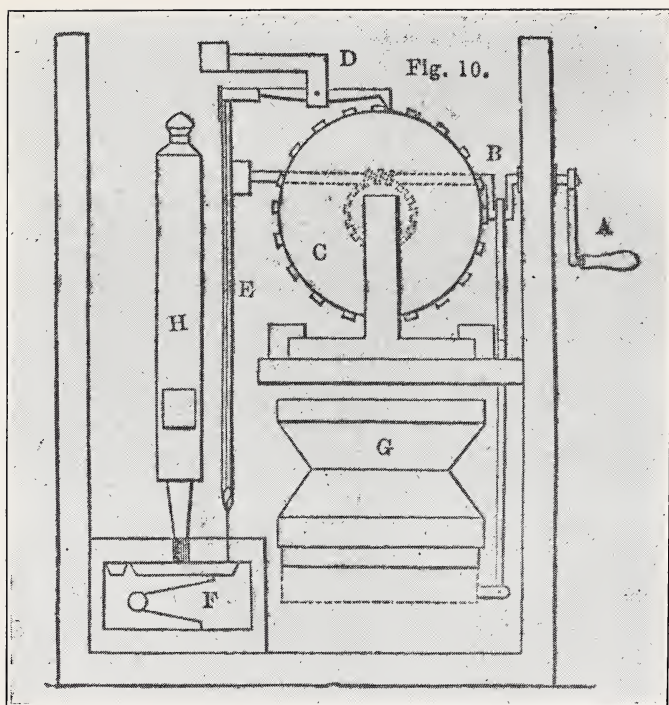
(d) Flute organ—because of its flute-like tones.

(e) Trumpet organ—because of the sound of some of its pipes and accounting for one of its commonest names.

(f) Barrel organ—because its notes were always produced by an unseen revolving cylinder or barrel set with pins.

(g) Hurdy-gurdy—originally applied to the Vielle, a rustic stringed instrument resembling the violin, played by a crank-turned rosined wheel. In recent times used for hand-organ.

MECHANISM—The hand or barrel-organ is a portable wind instrument, the keys of which are operated by a pin and staple-studded barrel. It is made to play by turning a crank which rotates the barrel, the pins of which trip the pipe-valves and it at the same time pumps the bellows which maintains pressure in the wind chest. The hand-organ barrel runs horizontally nearly the length of the instrument. It is made of wood, about six inches in diameter and is covered with paper on the roller surface. Into this surface, pins and staples of brass are set, encircling the barrel in rings set close together. They are about one-thirty-second of an inch wide and project about a sixteenth of an inch above the surface of the roller. Above and parallel to the barrel and running the length of it is the key-board, holding the keys. These are short squared sticks of wood set horizontally and centrally pivoted (so they may be given a see-sawing motion) with the free ends toward the grinder. These keys are spaced about a-quarter-of-an-inch apart. Fastened under the free end of each key there is a triangular plate of metal, not unlike a glazer's point. This is set so that the point of the triangle is downward in order that it may bear upon the barrel. This bearing-surface is about the same width as the pins and staples. At the end opposite the bearing, or free end of the key,



SECTION OF COMMON BARREL-ORGAN

A is the handle; B the *worm and crank*, which move the *barrel* and *bellows*; C is the barrel on which the tunes are set. The setting is effected by brass pins and staples driven into the barrel at proper distances, accordingly as the notes are longer or shorter. D is the key, the rising of which over the pins causes it to press down the sticker (E) into the wind-chest (F), and thus to open the pallet for the wind to enter the pipe above; G is the bellows; H, a stop-diapason.

Diagram from "Arts and Sciences," Charles Knight, London, 1867.

a rod is hinged. This is called the "striker." It runs vertically and on its lower end is fastened to the pipe valves or pallets. The lifting of the bearing or free end of the key by a staple or pin on the barrel causes the key to press down on the "striker" rod which opens the pipe valve leading into the wind-chest. The longer the staple the longer the valve stays open as the barrel revolves.

The wind-chest is a box in which the air is kept at constant pressure by the action of the bellows. The barrel is rotated and the bellows pumped by the hand crank-shaft. This runs horizontally from back to front of the case at the right hand top as you stand at the back or grinder's side. On this shaft there is an "U" shaped crank and a worm gear; hinged on the crank there is a rod which runs to the bellows. The worm gear meshes into a plain gear at the right hand end of the barrel. By turning this hand crank the bellows are pumped, the barrel rotated and each key (having its series of pins and staples aligned with it and girdling the roller) is pushed upward in the proper time and place, releasing the air from the wind chest into the organ pipes.

A tune is played in one revolution of the cylinder. If the tune is too long it must be cut to fit. From seven to ten tunes may be put on one barrel.

The bearing surface of each key being only as wide as the pins and spaced about a-quarter-of-an-inch apart, the pins and staples of the tunes not being played, pass idly between the keys. The wider the space between the keys the greater the number of tunes, and the fewer the number of notes that may be played for the same length of barrel. This may be why the seventh edition of the "Book of English Trades," published in London, 1818, says that some of the English organs played as many as fifteen tunes. The smaller hand organs have twenty-three keys, the larger thirty-two.

To change to a new tune it is necessary to shift the barrel. This brings a new series of pins in contact with the keys. The iron axle of the barrel projects through the side of the organ-case. Across the top surface of this projection is cut a row of slots. The number of slots corresponding to the number of tunes and their distances from one another on the barrel. By grasping the end of the axle and shifting it in or out, and holding it in

place with a knife-like wedge dropped into one of the slots, the barrel is held in alignment to be played by one series of pins only. Before shifting the barrel it is necessary to lift all the keys from the barrel, this is done by a lever at the end of the case. Knight says in his article on the Hand-Organ in the American Mechanical Dictionary, 1874:

"The most important part of the manufacture consists in arranging the position of the points or staples of the barrel. An ordinary piece of sheet music is before the workman and the barrel of a hand organ is mounted below it so as to revolve with a large wheel at his left hand. This wheel is divided up into parts which correspond to the bars in music. Above the barrel are a set of keys, with little teeth that indent the paper wound around the barrel. He sits down before the instrument, revolves the wheel one bar, and strikes with a hammer the proper keys, then revolves again, and so on. The indentations mark the places for the brass points and staples, which another man inserts."

The owner decides what tunes are to be placed upon the barrel.

Molinari says that it costs \$15.00 to pin a tune on a barrel and, for a 23-key organ, eight hours are required for the task, ten hours for a 32-key organ. In London in 1865 ten shillings was all that was asked for one tune according to Henry Mayhew and eight tunes could be put on an organ barrel for £14. This took from three days to a week if the workman wasn't busy. The principle of the pinned-barrel was used for playing carillons as early as the fifteenth century and the stationary organ as early as 1615 (Feldhaus, "Die Technik" Leipzig, 1914). The pipes are made from hardwood, as boxwood, or from reeds. These are tuned by pushing or pulling little pegs of wood which stop one end of the pipes. In this way the air chamber in the pipe is changed and so the pitch. It costs \$6.00 to tune a hand-organ and this should be done every 6 months. It is the trumpet part that gets out of tune the soonest. When the organ gets out of tune the pipes rattle. Dust in summer and smoke in winter and rain any time are the greatest foes of the hand-organ. This means that the organ must be taken to pieces to be cleaned. In London in 1864 it cost 10 shillings to clean and tune it. To keep out the dust and soot the organs require a covering.

The owners of hand-organs took great pride in elaborately inlaid wood and mother of pearl instruments. And then would hide them under coverings of water-proof oil cloth, bagging, etc.

The Molinaris tried to persuade the grinders from using decorated cases but the owners took pride in this beauty though hidden.

The portable barrel organ, in France called the "Orgue de Barbari," was invented in the eighteenth century by a Modenese by the name of Barberi, according to the "Dictionnaire des Arts, Metiers et Professions," by Alfred Franklin (Paris, 1906).

KINDS OF HAND-ORGANS—

The barrel-organ is made both stationary and portable. As a stationary instrument it was used in English country churches in the early 19th century. The portable barrel-organ, alias hand-organ, which is our subject, may be classified according to size. The small organ, about fifteen inches wide, fifteen inches tall and nine and a half inches deep, carried by a single shoulder strap and called in the

trade the "Monkey-organ." The medium size organ carried on the back by two shoulder straps and supported when playing by a post or stick is about twenty-six inches wide, twenty-three inches tall and fourteen inches deep and weighs about fifty pounds. The large organ was too heavy to be carried on the back, for it weighed 400 pounds. It was 41 inches long, 53 inches tall and 23 inches deep and was generally mounted on a three-wheeled hand cart.

Barrel-organs are also known according to their voices as "wooden trumpet" organs, "flute-organs," etc. The flute organs, so called because they sound like the German flute, were known as early as 1828 according to the New English Dictionary. The small "monkey-organs" were generally flute-voiced.



A PARISIAN ORGAN GRINDER
OF CIRCA, 1737

As shown in a contemporary copper engraving designed by Edme Bouchardon (1698-1762)

"The mendicant's organ seems to have appeared in the streets before 1702... It was called in French 'Orgue de Barberie,' either from a maker named Barberi or because of its disagreeable sound."—"The Story of the Organ," C. F. A. Williams, N. Y., 1903.

According to the organ grinder interviewed by Henry Mayhew (L. L.) the flute organ was first made by an Italian in Paris who obtained a patent for it. When these organs were first heard they attracted favorable attention and made quite a little money for their owners. Here is what Mayhew's grinder of organs said in 1860. When he came to England as a boy of ten:

"There was no organ about but the old-fashioned one made in Bristol, with golden organ pipes in front. Then came the one with figure-dolls in front, and next came the piano one, made at Bristol, too, and now the flute one, which came from Paris where they make them."

These flute organs cost £20 in 1860.

PUPPET HAND-ORGANS—The great child called man has liked dolls for thousands of years and one of the first things he did when he invented the smaller mechanism was to use part of their energy to animate his puppets. Clock dolls came shortly after wheel-work clocks and early in the history of the barrel-played organ the animation of birds, etc., is noted by Francis W. Galpin, who tells us in his "Old English Instruments of Music," London, 1910, that in the year 1598, when Queen Elizabeth had Thomas Dallam make a manual and mechanical organ with "self acting trumpeters, blackbirds and thrushes," which she sent to the Sultan of Turkey as a present.

The hand-organ with mechanically animated puppets was found in America as early as 1838, for Nathaniel Hawthorne in his "Passages from The American Note Books" (quoted by Richard Wright "Hawkers and Walkers in Early America," Philadelphia, 1927) says:

"After supper, as the sun was setting a man passed by the door (of the tavern) with a hand-organ, connected with which was a row of figures, such as dancers, pirouetting and twining, a lady playing on a piano, soldiers, a negro wench dancing and opening and shutting a huge red mouth, all these keeping time to the lively or slow tunes of the organ. The man had a pleasant, but sly, dark face; he carried his whole establishment on his shoulder, it being fastened to a staff which he rested on the ground when he performed. . . . He had come over the high, solitary mountains where for miles there could hardly be a soul to hear his music."

This was at North Adams, Massachusetts.

A hand-organ with puppets was seen by the writer in the summer of 1926 at Mr. A. H. Rice's shop in Bethlehem, Pa. It measured about three feet high, three feet wide and was about two feet deep. The puppets were at the top of the organ set

in a boxlike stage, the back of which was set with mirrors. The figures were made to waltz as the handle was cranked and the tune played. The men were dressed in long trousers of white, and their dark coats had the high, full-rolled collar, the fashion in 1825 or '30. This organ was too large to be carried and was probably mounted on a man-pushed cart when in use.

THE PEG SUPPORTED ORGAN—The large barrel organ, carried on the back, was supported by a post, peg or stick while it was being played. The grinders when walking carried the stick in the hand.

The shoulder strap on both the monkey and post-organ passes under flat metal eyes at the sides of the organ near the top and so under the case where it is buckled. A second pair of straps, sewed to the shoulder-strap at the side of the organ, pass over the top of the organ and are fastened together by a buckle.

The stick part way up from the bottom, has a step or bracket cut in it; the distance from this bracket to the top of the stick is equal to the height of the organ from the lower back edge to the top; on the top of this stick at the back a short perforated strap of leather is fastened. The back middle lower edge of the organ is now set on the bracket and the strap at the stick's top is buckled into a buckle in the middle of the cross-top strap. The organ, slightly tilted toward the player, stays on the bracket, the grinder steadying it with his left hand and arm as he cranks with his right. This stick was never attached in any other way according to Molinari. He regards this as an American device.

In Leech's drawing, "Portrait of the Old Party who Rather Likes Organ-grinding," the medium-sized organ is shown without a stick. The same is true of the organ in George Cruickshank's "The Seasons—November St. Cecelia's Day" and "The Seasons—July Dog Days." This might tend to indicate that the stick was not in use in England in 1860. However, the stick-supported organ was used at St. Helen's near Liverpool, England, about 1880, according to Mrs. William G. Parcell of Aquetong and Nathaniel Hawthorne (quoted in Wright's "Hawkers and Walkers") describes it at North Adams, Mass., in 1838.

THE CUSHION—This was described by Molinari as a pad fastened at its top to a belt which passes around the waist of the

organ-grinder, the lower end of this pad is fastened by a strap encircling the leg above the knee. A little way above the knee on this pad is a bracket or step (on the same order as the stick bracket). This cushion is worn on the left leg which thus serves the same purpose as the bracketed stick. Molinari considers this a foreign practice.

HAND ORGAN MAKERS—The name, Cocchi, Bacigalupo & Graffigna, Schonhauser Allee 78 Berlin, I saw painted on a hand organ for a cart. Frati & Co. had their house in this same street. A smaller organ had "Imhof & Co., 9 Bedford Street, London," upon it. Molinari said it was the first time he had ever noticed the name. (L. L.) John Hicks, living in Clerkenwell, London, made and repaired organs in c. 1864. Bristol seems to have been something of an organ-making town. John Hicks was born there (L.).

SOME TUNES PLAYED—Let us hear what Henry Mayhew's London Italian of the sixties played. He says, "My organ played eight tunes. Two are from opera, one is a song, one is a waltz, one is a horn-pipe, one is a polka and the other two are dancing tunes." One is from "Il Lombardi"; the other opera piece is "Il Trovatore." Here is an English piece called "Liverpool Hornpipe," also one called "The Ratcatcher's Daughter," and another, also English, called "Minnie."

The thirty-two key, peg-supported, wooden trumpet organ made by Frati & Company, some time after 1884, now in our museum, had two programs, an older one and a new one, each having nine tunes as follows:

THE OLD LIST OF TUNES

- | | |
|---------------------------|-----------------------------|
| 1. Somebody Has My Heart | 5. King Carnival March |
| 2. Moody and Sankey March | 6. Marching Through Georgia |
| 3. Fisher's Hornpipe | 7. Sweet Mollie |
| 4. Latest Polka | 8. Saint Patrick's Day |
| 9. La Marseligese | |

THE NEWER LIST SUGGESTS THE 1890'S

- | | |
|-------------------------|--------------------|
| 1. After the Ball Waltz | 5. Home Sweet Home |
| 2. Little Annie Rooney | 6. La Marseligese |
| 3. Tarara Boomdeay | 7. Travatore |
| 4. Club | 8. Irish Jig |
| 9. Saint Patrick's Day | |

An organ for small carts made by Cocchi, Bacigalupo & Graffigna, Berlin, Schonhauser Alle 78, played this program:

- | | |
|-------------------------------|------------------------------------|
| 1. atineurs Waltz | 5. Holzanktion Schottish |
| 2. Waltz | 6. Wiener Schevalben March |
| 3. Die guten laten Tage Polka | 7. Cavalleria Rusticana Intermezzo |
| 4. Barnay Ballargham Jig | 8. Tune not at hand |

The "Monkey-Organ" in our museum collection has one tune that we have identified, viz.: "A Hot Time in the Old Town Tonight," that swept the country in Spanish-American war days.

THE SERINETTE OR BIRD ORGAN—Because the finch (serin) may be taught to pipe man-made tunes, if these are repeated often enough, a miniature barrel-organ was devised called the Serinette. This was early in Eighteenth Century France when there was a rage for serins, and royalty had singing teachers for their birds.

Chardin (1699-1779), the painter of the familiar scenes of his time, painted the picture of a lady who had stopped embroidering to play the serinette which rests upon her lap. As she turns the crank she looks toward a bird in a cage nearby. This serinette is about a foot long, eight inches high and ten inches deep. It has a hinged cover which is open.

There is a serinette in the Metropolitan Museum of Art, New York, which is about the same size but is in the form of a book and only three inches deep. It was made in France in the eighteenth century by Tomasin. It has a compass of nine notes.

It would seem that the Bird-organ was thought more important to the French Academy than the beggar's organ, for we find "Serinette" defined in the "Dictionnaire de L'Academie Fran-coise" (4th Ed. 1762), while the mendicant's "Orgue de Barbari" is passed by in silence. It existed in 1737, but not for the Academy.

THE MONKEY—Pasquale Longo of Philadelphia, the former owner of the museum's monkey-organ, told Mr. Horace M. Mann, curator of the museum, at the time it was purchased in the fall of 1921, that he had been playing a barrel-organ for years and because of the industry of his monkeys had been able to make a small fortune. The monkey's life-span is about eight years. That is, if he is kept warm, for he is very likely to catch cold and

die, so must never be taken about in cold weather. In winters of enforced idleness Mr. Longo toasted his toes before the fire and collected rents from his tenants. It is quite a task to train the monkey to tip his hat and get pennies. Longo said that he was always kind to his monkey and the monkey seemed to vouch for that by nestling close to his owner. Around the monkey's small waist was a belt, and fastened to this belt a cord or light chain to keep him from straying too far. He would return to his owner on call. The monkey wore a small red fez with underchin strap and a coat. When Longo was ready to go to the next stand he swung the organ over his hip, the monkey sitting on top. Longo played at the Frenchtown, N. J., fair in 1921, and cleared \$19.00 in one day above his carfare.

The monkey was the great attraction for children, when they heard an organ they would flock to it, but would soon leave if no simian were there to amuse them with his antics. But if they saw their monkey friend, would follow him and his master for blocks.

So much for the crank-turned hand-organ which in its varieties, always a wind instrument, has been the theme of our description, but we cannot properly end the subject without mentioning another kind of street musical machine, also portable, also turned by a hand-crack, but not a wind instrument at all. I refer to the Street Piano.

THE STREET PIANO—This instrument, sometimes called the piano-organ or barrel-piano, is not a wind instrument, but a barrel-played string instrument. It is found in two general types, distinguished by the tones. The older and probably more familiar instrument, with piano tone, and a later development called in the trade the "Mandolin Piano." This instrument imitates plucked strings and the effect is much more brilliant than the older type of street piano.

The street piano looks like a small upright piano, placed on a low platform, swung between two large cart wheels, at one end a pair of shafts. Between these one of the attendants plays draught animal when on the move, the other (for there are always two) helps by tugging on a looped strap at the side of the piano. The average street piano has 48 notes and plays ten tunes (M.).

The earliest use of the word "piano organ" is 1844 from Albert Smith's "Adventures of Mr. Ledbury—Jack had hired . . . a piano organ" (N. E. D.). The street piano is also mentioned in "London Labour and the London Poor." However, in 1882 we find B. M. Crocker writing in her book, "Proper Pride," "The new piano organs are grinding away mercilessly at the corner of every street" (N. E. D.). From this we are led to believe that some change occurred in piano organs in the early 1880's. Doctor Mercer heard the street piano in Vienna in 1883 and remarked the beauty of its playing. Mr. Molinari says it came to America in 1890 and was heard in Philadelphia in 1891 or '92.

Some of these older pianos had pictures which appeared in a frame at the front in the panel which serves for music rack on the upright pianos. These Molinari called "panoramas" and they were a series of pictures fixed in a continuous belt. I too remember seeing them as a child in Brooklyn. The pictures at that time being highly colored lithographs of Spanish-American War scenes. If the children wished to gaze on these pictorial wonders, the flap of carpet which hung before the frame was lifted, a penny was the price. The pictures coming into the frame on the left would disappear behind the right hand margin as the grinder cranked the piano. The nearest approach to this form at Molinari's was a rather thick dumpy specimen of street piano with a lithograph in the front panel showing some people dining with "bottled goods," very much to the foreground. The picture, probably a wine merchant's advertisement of the "good old days."

These street pianos were often accompanied by a woman in Italian peasant costume who juggled and banged tambourines. I remember one quite expert who would send the tambourine spinning into the air to be caught on its sheep-skin head to continue its spinning on the performer's fingers.

THE ORCHESTRION—Beside the barrel organ and the street piano there is another and more modern type of instrument which is both stationary and portable, depending upon a pneumatic action which is controlled by a ribbon of paper or accordion-pleated card-board upon which the tune has been punched.

We have reason to believe that the idea of thus operating a

mechanical organ or piano was taken from Jacquard who by the use of perforated cards revolutionized the weaving of patterned textiles. On August 5, 1848, Duncan Mackenzie was granted a patent to make "Jacquard machinery, parts of which are applicable to playing musical instruments." In the words of the record of English "Patents of Invention," London, 1854, the "application to musical instruments of an endless band of paper, gutta percha, or other suitable material, having a tune punched out therein, for the production of sound." This was patent Number 12,229.

This punched-paper-operated pneumatic action has been used to play both portable and stationary instruments, both wind and strings, some with drums, cymbals, bells, etc., generally called "Orchestrions." The most common mechanism thus played is the well-known player piano. The ribbon of perforated paper passes over a row of slots, each slot controlling a key value. A gentle suction is set up in this row of slot key controls and the air is sucked in whenever a hole on the paper registers with a slot and that note is played.

The stationary organs of this type are found at most of the "merry-go-rounds" at our amusement parks. These are power-driven and, attempting orchestral effects, are hence termed "orchestrions."

"Orchestrions" of the smaller sort were made portable by putting them on a wagon gear and drawing them about the country by a small horse or pony. The instrument which Mr. Victor O. Krauskop, of Narberth, Pa., had seen frequently in the years 1898 to 1905 in Lancaster, Pa., was described as similar in appearance to a street piano. This instrument was hand-cranked. The tune was played by a record of punched cards which were fed to the machine on one side, and fell into a box at the other end. These cards were in a continuous strip and were folded back and forth upon themselves at all times except when passing through the instrument. This "orchestration" was not as loud as the power-operated machines so familiar in our amusement parks, but was louder than the street piano. It contained both a bass-drum and snare-drum. Accompanying it were an Italian man and woman, the woman in peasant costume. There were also trained birds and both organ and birds attracted a great deal of attention. The organ never stayed long in Lancaster but would return yearly.

The "books" or punched paper records for the pneumatic action "orchestration" are made of heavy brown paper the weight of light cardboard. The width of the paper varying with the number of notes of the organ. This paper is folded back and forth upon itself, as accordion-pleating is folded. The book seen at Molinari's was one made for Feltman's merry-go-round at Coney Island. It would play the organ for half-an-hour without repeating any of the tunes, but being arranged as a continuous belt it would repeat on and on throughout the day. It formed a block or pile about six inches deep, sixteen inches wide and about three feet high. The cost of the book was about \$100.00.

In making the books, a pattern of manilla paper, the same width as the brown paper, is fastened so as to cover a section of the blank book. This pattern is marked with a series of pencilled dashes of various lengths and varied spacing. These dashes run the long way of the paper. Both pattern and paper are passed under a foot-operated punch, the bed of which is centrally placed on a long work bench. This punch makes round holes of about an eighth-of-an-inch in diameter. The operator punch-cuts along the dashes; a series of round holes taking the place of each dash. Once a book has been made it may be used as a stencil and perforations marked on other blank books. The pencilled dashes of the pattern are made by a musician who uses a special gauging machine for the work. These perforations in the book select and operate the notes to be played by the automatic organs in their proper time and place.

PARISIAN STREET MUSIC, 1927—The stick supported hand-organ is not seen in Paris or elsewhere in France. The larger organs are trundled about on small hand carts. The street piano is seen in Paris mounted upon a two-wheeled cart, but it is much smaller than those seen in America; they are about four feet tall. The Mandolin Piano is not heard in Paris.

The cripples of Paris are permitted to grind organs, they are an adjunct of begging, denied to those who are in good health. The street singers who may play upon the mandolin, guitar, etc., and who vend songs are considered in a higher class and may pursue their occupation regardless of the state of their health. (Information of M. Brochot of Paris, June, 1927.)

OTHER STREET MUSIC—In closing these notes it might be well to pay tribute to some of the other minor workers in the field of music who, according to our moods and their ability, have either outraged or pleased us. There was first and foremost the little German band of three or four, each musician in bandman's visored cap. Music carried in lyre-shaped clasps on the instrument. A repertoire including "Ach du Leiber Augustine" and "Heilige Nacht." These men journeyed from beer saloon to beer saloon. The New York boys of the seventies would cause the cornetist in these bands to pucker his mouth and spoil his playing by sucking on lemons when they caught his eye, according to Mr. W. E. Palmer, of West Long Branch. The writer himself tried this with satisfactory results at Lillagore's pavillion, Ocean Grove, N. J., a lemon stick candy serving as a straw in a whole lemon. This was about 1900.

Then there was the one man band, he of the bass drum, strapped to his back, a rope passing from his left heel through the sides of the drum to the spring-separated cymbals on top. The drum stick was strapped to his left forearm and jutted out behind the half bent elbow. Bells were fastened to his cap and he carried an oboe or a clarinet. By flapping his arm he could beat the drum; kicking down with his heel brought the cymbals together, a nod of the head set the bells to jingling. With him was another player and between them they made enough noise for five men. This was seen by the writer near Asbury Park, N. J., about 1910.

Another effort in getting one man to make more music, was a guitar player who had a set of brass pan-pipes carried on a bracket which hooked over his shoulders, the pan-pipes in a slightly curved row, so as the player turned his head, his lips were always equidistant from the tops. He played the melody on these, the accompaniment on the guitar. Having played the tune thus he substituted a bracket-supported harmonica for the pipes. The third melody was played upon what might be called a nose-whistle, a tin affair which the player held in his mouth, the upper open portion pressing against his nostrils. It is played by blowing through the nose. This was seen by the writer on the Sixty-ninth Street (Brooklyn) Ferry about 1925.

The hand-organ man is not yet extinct. This summer of 1927 one was heard in Doylestown. That the organ grinder is

still to be heard on the East Side of New York is evidenced by a cartoon from the Jewish newspaper "Forwards" for May 15, 1927, which shows an organ grinder talking to a friend—says the organ-man, "Buying this record was a great mistake. I've collected only seven cents till now, while yesterday at this hour I had more than fifty cents. I tell you, Fanny, my public wants jazz."



STROLLING ITALIAN STREET SINGERS

Photograph by John A. Anderson in front of his home at Lambertville, N. J.

Letters from Native Bucks Countians Living in Canada, 1815

By MRS. C. D. (ANNIE MEREDITH) FRETZ, OAK LANE, PA.

(Doylestown Meeting, January 21, 1928)

THERE is a tradition in the Bradshaw family that James, son of John Bradshaw, came to America in the same ship with Ruth, a daughter of William and Martha Lowther, in the year 1729. They were married in 1740 and had twelve children: John, William, James, David, Amos, Joel, George, Rachel, Sarah, Ruth, Mary and Robert. William Lowther died in 1750; his will made the same year named Benjamin Fell his executor. James and Ruth Lowther had bought the homestead located in Buckingham township, four miles northeast of Doylestown and one mile southwest of Mechanicsville. James lived until the eve of the Revolution; his will bears date October 22, 1774, with his eldest son John as executor. He had married Hester Dyer of Dyerstown, Bucks County. David, son of James and Ruth Lowther Bradshaw, bought the property, and it remained in the hands of their descendants until the death of Ruth Anna Lippincott and her sister, Anna Maria Meredith, a period of more than one hundred and fifty years.

It is interesting to trace the genealogy of the family. William and James lived in Plumstead and John lived at Pool's Corner, formerly called Bradshaw's. This accounts for the homes of four of the brothers, but it was not known to the present generation where the other three resided until certain old letters were discovered, written from Canada during the years 1803 to 1816.

A nephew, George, wrote to his uncle John, and Joel wrote to his brother David, that Amos had died 21st day of 10th month, 1801, and that his brother George came up to visit him. The letters which are made the subject of this paper are quite lengthy, and I shall therefore give only extracts from them.

The oldest letter was written by Joel to his brother David, as follows:

13th of the 2nd month 1803

Brother David:

I take this opportunity to let thee know that we are all well at present and hope thee and thine are the same. It is a long time since I had a chance

to write to thee by Jacob Neece of Tinicum, who has resided here this some time. Fine large crops are in the ground, but lies bare having but little snow this Winter, the depth only ankle deep, and quickly gone. New Years was very warm, indeed bare ground nearly all Winter. Jacob and Israel go to school to Zenas Fell. We have very fine land, and a very good bearing peach orchard, given by the Government at six pence an acre. Halifax being the seat of Government about 36 miles from our town, Ralph Clench, one of the heads in matters, gives me great encouragement telling me I shall draw my two hundred acres of land. It is a long time since I had a fine letter from thee, David, I badly want to hear from you all. I shall look for thee next fall. I think thee has promised to come. We live in peace and plenty. We learn that the war is ended. People are coming in here with their families. Two of Gabriel Wilson's sons from the Jerseys. A committee that pays a visit yearly, Benjamin Clark was one last fall who preached the gospel devotedly.

George Bradshaw writes from Upper Canada:

Dear Uncle:

I again resume my pen to visit thee with some account of thy relations in this country, as these epistolary visits are the only sort we must expect in this world. Uncle Joel's daughter Betsey was married last May, and she and Mary have both gone to the western side of Lake Erie, about 120 miles off. I am going to keep school at Thorold.

5th month 27th 1815

Dear Uncle:

Thine of the 20th of last month I this day received, Elizabeth Fell is very ill, Zenas and all the rest well. My Uncle George's children, except George, all married and well settled. My brother Amos was in the army from the first of the war. First Conductor of Commissary Stores at the time General Brown came on last summer.

Pelham, 3d month 19th, 1815

Dear Uncle:

Our land has been visited with sickness since I last wrote. First with the Typhoid Fever. In a little more than 12 months near 40 new graves were opened in our burying ground at Pelham. On the 18th of 12th month, 1812, I was seized with Pluritic Fever and my dear wife departed this life in 1813, my youngest child six days after its mother and Aunt Mary Bradshaw the next day. My sister Rachel Thomas died this winter. Tell my cousins I should be very glad to receive a few lines from them, as I expect they can write at any time now the war is over.

Thy loving and affectionate Nephew

GEORGE BRADSHAW

Pelham, June 16, 1815

Dear Uncle:

Notwithstanding I wrote thee the week before last, I again resume my pen to give thee and our dear relations in Pennsylvania some account of our present situation. My dear sister, Sarah Beckett died after a short but severe illness, she was buried at Pelham beside our father and mother. Thee may put thy letter in the Doylestown post office and they will come safely to Buffalo. The mail comes every week to Beckett's with newspapers.

Thy affectionate Nephew

GEORGE BRADSHAW

Hilltown Baptist Churches and Schools

By MRS. WARREN S. ELY, DOYLESTOWN, PA.

(Doylestown Meeting, January 21, 1928)

THIS history of the Hilltown Baptist Churches and Schools is being preserved through the medium of a man in one of the most humble walks of life—a junk dealer—who two years ago came into the library and gave to Mr. Ely a roll of ragged papers with the comment that they were probably unimportant for he had found them in the old Rowland House in Hilltown. These papers proved to be the original records of the first organized Hilltown Baptist Church. This coincidence led me to search for other records, which I found in the hands of the present trustees, dating from 1798, down to the present time. They are now in possession of this society, making a complete record of this church from its foundation.

This recital begins with a history of the founder, Rev. William Thomas, who was born in Lauwenarth, Menmouthshire, Wales, in the year 1678. His family was possessed of some means and consequently William Thomas received superior education. When past the age of 30 years he married Ann, presumably Griffiths, born in 1680, and four years later, in the year 1712, he came to America, accompanied by his wife and infant son, Thomas, having lost all his earthly possessions in transit.

In 1713, he settled in Radnor township, Delaware county, where he pursued his trade as a cooper. Here his son, John, was born in December, 1713. That he was a shrewd, industrious person is evidenced by the fact that in five years' time (1718) he had acquired sufficient capital to purchase from Jeremiah Langhorne 440 acres of land in Hilltown township, Bucks county, a tract lying along the County Line from Line Lexington to Telford, for which he paid \$234.67, less than 50 cents per acre.

During the next ten years he acquired an additional 800 acres in three different tracts for which he paid approximately 70 cents per acre, the last of these being 106 acres, acquired in 1725, four acres of which comprise the grant to Hilltown Baptist Church.

Elder Thomas was a member of Montgomery Baptist Church and labored there as a leader and instructor and between the years 1725 and 1737 conducted religious meetings in neighboring homes and the open air. In 1737 he decided that the growth of the community necessitated a meeting-house in closer proximity and he gave them four acres of forest land and proceeded to erect a meeting-house upon it. Some say it was of stone, but I believe it to have been of logs, and the laity doubtless assisted him in clearing the land and hewing the logs for its construction.

Those of us who know the beauty of this location—the broad expanse of beautiful valley and the charm of the landscape—can find in the benefactor an inherent love for nature. This we find displayed in his selection of a hollow tree for his first pulpit. This edifice remained until 1781, during which time it was not an independent organization, but a branch of Montgomery Church.

The useful life of Rev. William Thomas came to a close October 6, 1767, and he was succeeded in his labors at Hilltown by his son, the Rev. John Thomas, and we find this appropriate testimony to his piety on the stone slab over his grave in Hilltown Baptist Cemetery:

“In yonder meeting-house I spent my breath,
Now silent mouldering here I lie in death.
These silent lips shall yet awake and then declare
A dread Amen to truths I uttered here.”

His will, dated December 11, 1753, and recorded in Will Book 2, page 315, contains the following:

“I, William Thomas, of the Township of Hilltown, County of Bucks, Yeoman, stricken in years, do make and ordain this my last will and testament.

I give and bequeath unto the inhabitants of Hilltown Township forever the meeting-house erected by myself, together with the grave-yard in which to bury their dead, and all others, far and near, black or white.

Such as guilty of self murder only I reject and deny to be buried in the grave-yard or any other part of my land.

I give liberty to the said inhabitants to enlarge the said grave-yard as much as occasion may demand, the same to be laid out and bounded as follows:

To begin at Henry Lewis' corner post, thence South-east some what farther than the spring or well which belongeth already to the said meeting house 35 perches, thence north-east 20 perches; thence north-west 35 perches to a white oak sapling by the Great Road (now Bethlehem Pike), thence

along said road south west to place of beginning, containing by estimation 4 acres of land & some perches.

I forbid any timber to be cut on said lot for any use save to repair the meeting house, grave-yard, etc.

The said meeting and lot of land I give unto the inhabitants of said township forever to bury their dead in and school their children (I also allow others to send their children there) and to perform christian worship—but under the foregoing and following directions and restrictions, viz:—

I allow all tolerated ministers to preach funeral sermons either in the grave yard or Meeting house. Papists and heretics I reject and altogether deny them any grant.

My will is that the Baptist hold religious services in said meeting house as often as possible, but not any one that deny the Nicene Creed.

I allow the Presbyterians to preach in said house, provided they hold the Westminster profession of faith, likewise Independents. If it so happen that any of them will not swear allegiance to a Protestant King, such I deny and disallow altogether.

Papists and Moravians I allow not to preach in said house, nor any other strangers let them appear ever so Godly until they are well known to be bound in the faith.

I will that catechizing children be kept up in said meeting house forever, by orthodox catechism, and in order that my will be observed I constitute and depute my 5 sons, Thomas, John, Ephraim, Manaset and William to assist and take proper care therein, and I direct them in their wills to depute some honest religious man in place of each of them to answer the care and trust I have reposed in them."

At a regular business meeting at Montgomery Church, November 10, 1781, the following resolution was adopted:

"The Church of Jesus Christ baptized on profession of faith and meeting in Montgomery aforesaid, taking into consideration ye distant situation of many of its members residing in Hilltown township and other good causes and them there unto moving—do agree and conclude, that the following persons being of regular standing, and in full unison and communion in this Church shall be dismissed from us for the purpose of being constituted a regular Gospel Church in Hilltown aforesaid, to hold and occupy the Meeting house now pertaining to them with us in the Township aforesaid—viz., and that when they shall be constituted, they will be fully dismissed from us. And we pray they may be abundantly blessed of the Lord, made a fruitful nursery and a Mother in Israel.

THOMAS DAVIS	CHRISTOPHER WELLS
ISAAC JAMES	HENRY HARRIS
PETER EVANS	JOSEPH GRIFFITHS

Elders of Montgomery Church."

There were 48 members constituting the first organized Baptist Church of Hilltown, viz.: Enoch Thomas, John Brittain,

Thomas Mathias, Rebecca Pugh, Evan Pugh, Manasseth Thomas, James Morgan, Rachel Hardy, Alice Mathias, Moses Aaron, Job Thomas, Rebecca Thomas, John Mathias, Mary Thomas, Sarah Thomas, Alice Lunn, Rev. John Thomas, Sarah Thomas, Sr., Elizabeth Mathias, Sarah Thomas, Nathan Evans, Nathaniel Brittain, Margaret Jones, John Brittain, Ann Young, Hannah Cosner, Joseph Brittain, Abigail Brittain, Rebecca Rowland, Rachel Morris, Mary Eaton, Mary Nelson, Thomas Jones, Mary Riley, Sarah Thomas, Mary Griffith, Margaret Jones, Eleanor Thomas, Elizabeth Vastine, Gwently Morris, Anna Brittain, Amos Thomas, Ruth Thomas, Isaac Freeman, Sarah Parker, Hannah Mathias, Elijah Davis, Elizabeth Davis.

The church edifice erected in 1737 was replaced in 1781 under the new organization by a structure of stone and the Rev. John Thomas (son of Rev. William Thomas) became its first minister, remaining until the infirmities of age required his resignation in 1786. His pastorate was a successful one for in the first four years he had added 54 new members to the congregation. He died October 30, 1790.

March 26, 1789, a call was extended to the Rev. James McLaughlin, of Dorchester county, Maryland, he serving until 1804. A charter of incorporation was drawn for Hilltown church and congregation during his administration in the year 1796 and a seal adopted with the inscription of a dove bearing an olive branch the device Hilltown Church.

November 24, 1804, at the request of the trustees, Joseph Mathias was asked to take charge of the churches at Hilltown. Although he was not licensed to preach until January 21, 1805, he continued to serve until his death in 1851.

Now we come to the organization of the Hilltown Baptist Church, at Nace's Corner. As these churches were under the direction of the same officers and presided over by the same ministers they bore the distinction of the "Upper Church" (Nace's Corner) and the "Lower Church" (Hilltown) and are referred to as such in the records.

In 1750 John Kelly donated an acre of ground for the establishment of a church three miles northeast of the Lower Church, called the "Upper End," and in his will recorded February 22, 1760, Will Book 3, page 15, he refers to this "One acre where the meeting-house now is" which would indicate that a meeting-

house was erected upon the lot, and no doubt both Rev. William and Rev. John Thomas preached there, for there is no record that these two churches were ever independent of each other.

By resolution adopted March 29, 1802, plans were made to build a new meeting-house on the lot at Nace's Corner, dimensions to be 35 by 28 feet, wall to be raised so high that it will afford a gallery in one end, and having the pulpit placed in the other end, to have two doors, one in the end under the gallery and the other in the front of the house. To be ceiled with boards on a flat ceiling, the house to be wainscoted, 5 feet high. The old meeting-house was then demolished and the new one begun April 12, 1802. Phillip Miller & John Mathias were the carpenters. The building was completed and paid for November 9, 1802, and was over-subscribed. Cost of construction being \$858.19. The ledger account of this transaction is very interesting when compared with the cost of labor and material today. This church was erected under the pastorate of the Rev. James McLaughlin, and during the first administration of these organized churches and schools. May 1st was the day for their annual settlements. Between the years 1796 and 1802, a new church was erected, a school established, a parsonage erected, and the lower meeting-house remodeled.

HILLTOWN BAPTIST SCHOOL—You have observed in the will of the Rev. William Thomas this clause, "The said meeting-house I give to the inhabitants of Hilltown to school their children." Since I have been unable to find any records of a school building erected during the life of the Rev. William Thomas, I believe the above clause would indicate that the meeting-house was used for school purposes as was customary in those times.

In 1796 application was made to purchase the school lot. In Deed Book 29, page 461, dated August 5, 1797, we find that the following trustees of Hilltown Baptists, viz., Rev. James McLaughlin, Manasseth Thomas, Griffith Owen, Isaac Morris, Benjamin Morris, Benjamin Griffith and Thomas Mathias, purchased from Thomas Jones 30 acres of land adjoining the church property for the sum of \$400, and on February 6, 1797, the board of "trustees drew a code of regulations" governing said school as follows:

Sec. 1—Two or more persons shall be appointed as managers from among the trustees annually to superintend the school.

Sec. 2—The said managers shall be satisfied with the moral character of any master as well as his abilities in literature before he is received as a teacher.

Sec. 3—In consequence of a general complaint among the employers respecting bad conduct in the master, the managers have power to prevent his continuing his term, and he to receive payment only for what time he has been in service of his employers.

Sec. 4—He is instructed to use no partiality among the scholars, otherwise he will expose himself to the aversion and contempt of the employers and scholars, but to govern them with gentle insinuation and sovereign delight. Passed into a law Feb. 6, 1797. Signed by James McLaughlin, Manasseth Thomas, Isaac Morris, Griffith Owen, Benjamin Morris; Thomas Mathias, secretary.

This paper bears the newly adopted seal of the Hilltown Baptist Church.

As there was not sufficient funds in the hands of the trustees to pay for the lot when purchased, title remained in the hands of Thomas Jones (who had purchased same from William Musgrave) until January 29, 1798, when title was vested in the directors and this school existed for 80 years under the direction of the Hilltown Baptist Church.

There seems to have been a small house on this lot when purchased for on July 29, 1798, it was agreed to build a new house adjoining the old one and attached to the west end of the old building, the dimensions to be 17 by 22 feet and two stories high, with an entry six feet wide through the first story and one room, second floor to have two rooms and to be constructed of frame. The cost was £126 18s 6d. This became known as the parsonage lot and doubtless was the home of the Rev. James McLaughlin for a portion of his term, for the church records indicate it was rented after his pastorate. The Rev. Joseph Mathias having occupied his home near Chalfont.

That the executive ability and the careful administration of the first trustees of Hilltown Baptist Church played an important part in the life of the church and community is plainly seen in the records now in our possession, and to such men as Thomas Mathias, merchant, who was secretary of the board of trustees during the "business administration," whose pioneer system of bookkeeping compares favorably with that of today, and to the Rev. Joseph Mathias, who was president of the trustees for

many years and at the close of whose pastorate a charter was granted by the State of Pennsylvania to Hilltown Church, thus making secure for posterity the bequest of the founder, Rev. William Thomas.

Among other important members of this church was Daniel Pugh, who came to Hilltown in 1756 and married in 1760 Rebecca, daughter of Rev. John Thomas. John Pugh, son of Daniel, was active in affairs of Lower Hilltown Church, and is frequently mentioned in the records. He filled many offices of trust, such as Recorder of Deeds, member of the Legislature, 1800-1804, member of Congress, 1804-1808, and was many years Justice of the Peace.

Among prominent persons interred in the adjoining cemetery are the patriarch and founder, Rev. William Thomas, and his five sons, and his daughter, Gwently, who married Morris Morris, prominent in public and religious affairs, and Ann, who married Stephen Rowland; also Benjamin, son of Morris and Gwently Morris, the well known clock maker and Sheriff of this county, 1830-1832; and the Honorable Mathias Morris, a member of Congress in 1839, who was a great-grandson of the founder. There are many others of importance whose names appear on these records, but some are buried in the adjoining graveyard, and the inscriptions of these crumbling field stones can be seen on record in the Bucks County Historical Society. As I wandered over this historic spot, I found the spring mentioned in the will of the founder 190 years ago trickling along through what remains of the once thickly forested tract and as it flowed it seemed to me to echo the words of the Poet Tennyson, "Men may come and men may go, but I go on forever."

Dolington, Past and Present*

By BARCLAY EYRE, DOLINGTON, PA.

(Doylestown Meeting, January 21, 1928)

PREVIOUS to 1800, "Dolinton," as it was then called, boasted of but three houses. The first, a log house, built by Peter Dolin, stood upon the site now occupied by the store owned by P. A. Leland, and kept by Robert L. Balderston. A portion of the old log house still remains, as a part of the present building. The second, a frame house, on the site of H. C. Hellings' residence, was thought to have been built by Dolin also, but occupied by Benjamin Canby. The third house, the one now used as a hotel, was built by William Jackson, in 1800, and used as a store for about 28 years. Oliver Hough kept store there for a number of years. The fourth house, or shanty, was built soon after this, on the opposite side of the road from Dennis Hogan's residence. It was known as the "Black Horse," and was occupied several years by James and Patty Cullens, who sold cakes and beer, for a living. About this time a tannery was established near Joseph Lambert's residence. It was run by Joseph Lownes. Another house was built just north of this, in which lived Paul Judge, an eccentric school-master. He married Peter Dolin's daughter.

During the next thirty years "Dolinton" made rapid progress in many respects. It stretched itself out upon the three highways leading from Dolin's corner, until it reached almost its present limits. The Post Office, formerly called "Lower Makefield," was changed to "Dolington" in 1827. Whether the "g" was inserted by accident, or for the purpose of adding dignity to the title, is not known.

About this time, William Taylor, better designated to the present generation as Robert Eastburn's grandfather, built the store now occupied by Robert Balderston (Dolin's), and for several years, with his sons, conducted a flourishing business there. He died in 1831, (and his four sons died near the same

* This paper was first read at the Dolington school-house, in the interest of the library, December 30, 1881, by Barclay Eyre, from information gathered from Samuel Buckman, Benjamin P. Burroughs, Robert M. Croasdale and from other sources.

time), leaving a widow and two daughters, who sold out to William Evans, and removed to Newtown.

The tailoring business of John Headley was very flourishing about 1830 to 1835. He occupied the house now owned by Charles Janney, and employed eight or ten hands. The coach and wagon factory of Oliver P. Ely and James Briggs, established in 1833, also did an extensive business. They were succeeded by the present occupant, Isaac Randall. The smithing establishment of Seth Davis, on the corner now owned by Frederic Griscom, gave the town more ring than all the rest, he having three or four apprentices all the time.

In my boyhood days, the old wheelwright shop across the way, on the H. C. Hellings property, was run by John R. Bitting, who later removed to Doylestown. He was at one time our village Postmaster and kept the Post Office in the lean-to adjoining the dwelling. The mails, at that time, were brought from Philadelphia by stage coach.

The period embraced in the first forty years of the present century, appears to have been one of great mental activity and business enterprise for this small community. Dolington, in those days, was a business and literary center of no mean importance. People came from the surrounding country, many miles to patronize its various industries. The enterprising spirit of its inhabitants was shown by a meeting held at Trump & Saterthwaite's store, in 1836, to "take steps toward improving the sidewalks." A committee for the purpose was appointed, and the farmers of the neighborhood hauled the gravel.

In the Fall of 1833 the far-famed Dolington lyceum was first organized in the old school-house near Friends' Meeting. Could those old walls now re-echo the words that once thrilled many a heart, how eagerly would we turn a listening ear. It was there the young ideas of our grandfathers, our fathers, and many of the present generation, were "taught how to shoot," both under the teacher's rod, and beneath the burning eloquence of many a hotly contested debate.

The old school-house, belonging to Makefield Meeting of Friends, was built about 1830, under the supervision of Samuel Buckman and Jesse Lloyd. The one which it replaced was a log building, and had been in use as a school-house, probably seventy years. Previous to 1850, the school was conducted

under the care of the Preparative Meeting, the last committee in charge being Samuel Buckman, Jonathan Paxson, Preston Eyre and Samuel C. Cadwallader. During their term of service the school was turned over to the school board of the township, and became a public school, with Isaac Randall as director.

In 1859 the new school-house at Dolington was built, and first used for school purposes that Fall, with Annie E. Phillips as teacher of the primary grades, on the first floor, and Sarah M. Fell as teacher of the older pupils, on the second floor, the writer being one of these.

In the "old school-house" the intelligent citizens of the community were wont to meet for the promotion of all public enterprises. There, on the 16th of March, 1816, a "respectable number of persons assembled for the purpose of consulting on the practicability of establishing a library." At an adjourned meeting held 9th of 5th month, 1816, the committee previously appointed, reported having obtained subscriptions to 31 shares at \$5 each. They thereupon adopted a constitution and elected the following officers: Directors—Charles Buckman, Thomas Betts, Benjamin Taylor, Jr., Abram Slack, Jr., and Jonathan Paxson; Treasurer—Charles Cadwallader; Secretary—Mahlon K. Taylor.

Of the original members, one is still living, Samuel Buckman, now of Newtown township. Several others have died within a few years, whose names are familiar to us: Jonathan Paxson, Mahlon K. Taylor, Thomas Betts, Robert Longshore, Benjamin Taylor, Benjamin Beans, William Cadwallader, and Richard Janney.

Among those who bought shares early in the history of the library, we notice the name of Joseph H. Yardley, Esq., in 1820; Seneca Beans and Mahlon K. Knowles, in 1824; Benjamin Burroughs, in 1828, and Robert S. Trego, and Charles B. Hill, about the same time. Josiah B. Slack's name appears some years later.

Of those who are still members of the Library Company, the name of William Lloyd appears as Secretary and Director in 1837; and Samuel C. Cadwallader in 1840.

When first established, the library was kept in a room over the store of Oliver or Phebe Hough, now the hotel property. In 1829, it was moved to a room in the second story of William Taylor's store (now Robert Balderston's), where it remained,

with the exception of two years, 1839 and 1840 (when it was kept over the old school-house), till 1858, when the present library building was erected, and the books removed thereto in Benjamin Lloyd's market-wagon, the writer of this paper assisting in the moving. In 1838 the tailor shop of Charles Howell was built by the Directors of the library, at a cost of \$65, but, for some unexplained reason, was never used by the library.

ADDENDUM, 1904—During the Summer and Fall of 1904, the books of Makefield Library were disposed of, Philadelphia parties purchasing those of value for \$60. The balance were sold at public sale, together with the building, furniture and sundries, amounting in all to about \$115. One hundred dollars of this was placed in trust with the Bucks County Trust Company, the income thereof to be paid annually to the teacher in charge of Dolington public school, on certificate attested by the local Director, said income to be used in the purchase of books for the Dolington public school library.

Reminiscing Around an Ancestral Fireplace and Bake Oven

By MRS. WARREN S. ELY, DOYLESTOWN, PA.

(Doylestown Meeting, January 19, 1929)

WILL you go with me to Western Pennsylvania and in an ancestral home join me in a noon-day dinner cooked and baked in an ancestral fireplace? A description of the farm house seems necessary to better illustrate my story. The house, a stone one, is built against a bank or terrace. The first floor consisted of a very large kitchen, living room, parlor and a large hall which opened into the garden yard; the second floor contained the sleeping rooms and a large hall which opened into the yard and flower garden.

The fireplace around which this story centers occupied all the kitchen end except the space occupied by the door which led into the living room, the chimney furnished a fireplace for both rooms, it was constructed of stone throughout, including the hearth. No andirons were used in these fireplaces; they were very large and at all times contained a huge log or stump which was rolled against the partition-wall and buried in the hot embers of a previous log, always affording hot embers for every purpose. These chimneys were natural ventilators, never once do I recall odors of cooking emitting from them, but rather do I recall watching the coils of tobacco smoke as they wended their way in beautiful rings into the chimney.

All of the cooking utensils were of iron and all had legs, including the pots used on the crane, some had iron covers including the bake pans. We will watch the old Swedish cook while she prepares dinner. She has in the pot hanging on the crane part of a large ham and with it she cooks cabbage and potatoes. In front of the fireplace stands a table scrubbed until it is as clean as the dripping snow. On this table is a bread-board and on this she rolls out a biscuit and scores it with a knife. She has previously raked to one corner of the fireplace some hot coals and over this has placed an iron pan on legs having an iron cover. She removes the cover and lifting the dough-board containing the biscuit she slides it carefully into the pan and covers it. She

then removed from the other side of the fireplace a similar pan containing baked apples. All of this time the flames seemed to envelop the three-legged pot hanging upon the crane as it intermingled its steam with its odor and all vanished in vapor up the chimney. As she pulled the crane with the hook, Great-grandma removed the biscuit from the pan and broke them where they were scored and then journeyed to the cave cellar to bring a pan of milk and the delicious farm-made butter, and dinner was served.

Great-grandma's bake-oven was across the yard from the house and was constructed of brick. It had an arched roof, a chimney at one end and an iron door at the other. On bake-days a fire was built in the oven and when the bread was ready the wood and embers were removed and the baking proceeded.

I recall seeing the old Swedish maid putting the bread to raise in a wooden bowl and after covering it with part of a home spun blanket, she placed it in front of the fireplace. When the bread was ready for the loaves, two-inch planks about six feet long by twelve inches wide were placed on the dough-table and as each loaf was moulded it was placed on these planks, each a reasonable distance apart. These planks were then placed on the hearth. When the bread was ready for the oven the planks containing the loaves were carried across the yard, placed in the oven and carefully watched for a time to determine that the temperature was not too great; if it proved so to be, the door was left ajar a few minutes. When the bread was ready to be removed from the oven a large basket, lined with a white cloth, was carried to the bake oven and each loaf removed with a long handled scoop (peel) and placed in the basket, after which the boards were scrubbed with lye water and placed in the sun to dry.

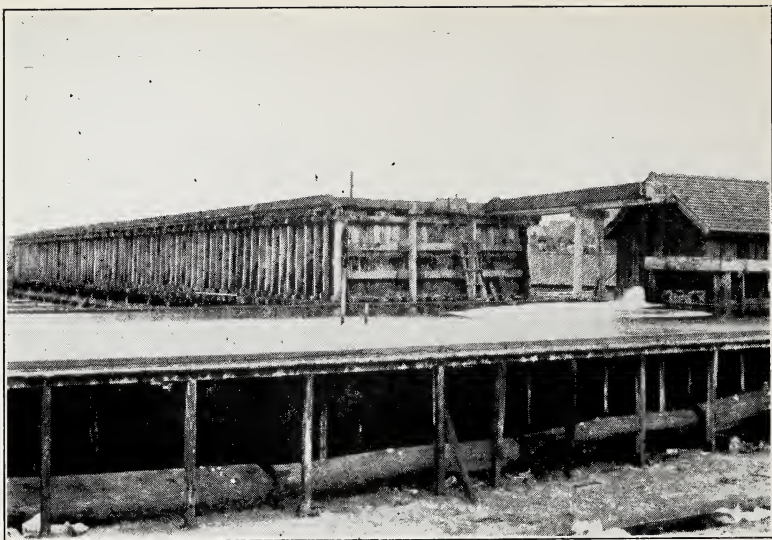
During festive occasions and before Christmas, a hot oven always contained mince pies sufficient to last most of the winter, and could always be found on grandma's swing shelves in the cave cellar. Mince meat made at butchering time and packed in stone crocks covered with several thicknesses of paper tied down with a string could be found with the crocks of lard on the spring house floor.

We will wander away from the fireplace of cookery to the one across the threshold in the living room, for a long evening

before a big blazing fire, all that remains of an apple tree stump. Every member of the family gathers there, and the stranger within the gates. The fireplace is of such monstrous proportions it can accommodate only in circle formation all who are there assembled for evening worship, which always included scripture reading and a prayer. We children always broke the circle when the over-indulgent farm hand Mike, brought a pan of butternuts and walnuts from the wood-house, and Greening, Winesap and Northern Spy apples from the cave, and some one raked over hot coals to one corner of the fireplace where we popped corn in an iron pan with a cover, then to bed in Great Aunt's bed, after having assisted digestion by practicing the art of climbing the steps leading up to it. I shall ever be grateful to dear auntie for removing the folds of the feather bed from my face as I sank into what seemed to be utter oblivion.

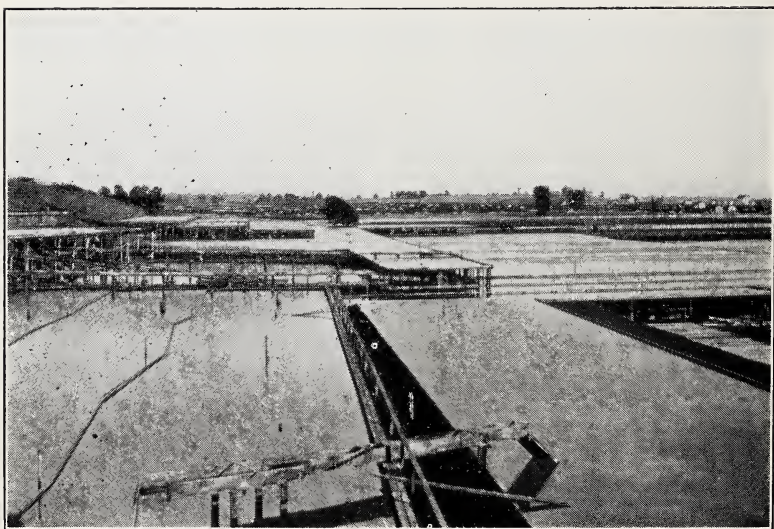
I have lived to see, first, a brick industry and now a railroad center with huge car shops completely smothering every evidence of this old home, do you wonder that I say:

"Backward! turn backward! oh time in your flight,"
And bring me this sanctuary with its fireplace to light.



APRONS OR DEEP ROOMS AND LIME ROOMS

Shown in the background where the soluble impurities are first precipitated. In the foreground are the long shallow vats or lime rooms, where advanced evaporation removes the sulphate of lime, the most common impurity. Underneath is a line of perforated brine pipes.



EVAPORATING VATS

"Salt Rooms" or vats where final evaporation takes place.

Making Solar Salt

By HORACE M. MANN, DOYLESTOWN, PA.

(Doylestown Meeting, January 19, 1929)

WHEN Doctor Mercer published a small leaflet or Museum Guide in 1927, under the subject of Food, subdivision Mineral Food, he regretted that we had nothing in the way of tools, implements, machines, etc., to illustrate the acquiring or preparing one of the only two Mineral Foods used by man—Salt. We had tried repeatedly to secure something to fill this gap in our collections, but always failed and it was very gratifying to us in 1926, when Mr. Thomas K. Gale, of Syracuse, New York, offered to give us a complete set of everything used by him in the rendering of salt from brine.

Salt has played a great part in the domestic economy, political history, commerce and wealth of man. The first trade routes were established for the traffic in salt; nations have fought for the possession of salt mines, wells and springs; Venice owed much of her wealth to the revenues from salt lagoons; Marco Polo mentions blocks of salt stamped with the king's seal used as currency in an Oriental country; New York state built the Erie Canal, to which the state owed so much of its early progress, largely from revenues from the salt springs. It has played a part in religion and because of its preservative qualities has been the symbol of eternity and incorruption. Christ called His disciples the "salt of the earth," meaning, no doubt, that in them lay the preserving of the Christian religion. But after all the principal and fundamental sphere has been in the domestic life of man in the seasoning and preserving of his food.

Salt is a constituent of all blood and is present in every part of the human frame as is shown by the tears and perspiration. It is unquestionably essential to many forms of plant life and we may assume that it is vital to animal life through the instinct of wild animals to travel long distances to reach salt springs or "licks." On the other hand, as certain primitive tribes do not use salt with their food it is not absolutely necessary to human existence although these people may secure a certain amount of salt by eating their food raw or cooked in such a way that the

natural salts are not destroyed and they may be still, in a sense, salt consumers. All other people of whatever race, clime or degree of civilization they may be, use salt in a pure form as a seasoner of food, and as such has been used far behind the dawn of history for the most ancient records contain no mention of its first use as a condiment, but, on the contrary, speak of its use as accepted and commonplace.

It is such a common thing in our life that we fail to consider it even as Shakespeare's King Lear did. Not only as a seasoner of food is it important, but as a preserving agent. Until the fairly recent introduction of refrigeration and refrigerator railroad cars, the only method of preserving and shipping food, especially meat and fish, was by packing in salt. Every one remembers the late fall butchering in nearly every farm and a good many village and town homes and the pickling in salt of the shoulders, hams, spareribs, etc., of beef and hog to last the family all through the winter. But the domestic preserving was small compared with the commercial side where western meat was shipped to the big centers of the east packed in salt; eastern fish shipped west in the same way; armies fed on salt meat; ships provisioned for long voyages. It was not until the War of 1914 or a little earlier that "cold storage" finally crowded out the use of salt for these purposes.

Enough for the importance of salt! Every reference book refers to the value of salt, from the Bible down.

Fortunately for man the distribution of salt is wide, for there are few nooks or corners of the earth where salt is not found, either in mines of rock-salt, salt incrustations on the surface, salt in solution in salt lakes and brine springs and lastly in the sea itself.

Books could be and have been written about the various methods of acquiring and refining salt from these various forms of deposit, but I will confine my paper to the salt or brine springs or wells and particularly to those wells and the methods of refining of Mr. Thomas K. Gale on the east bank of Lake Onondaga near Syracuse in New York State.

These brine springs, in the heart of the Iroquois country, were first noted by the Jesuit, Father Lalemont, in 1645, and other Jesuit missionaries showed the Indians how to make salt by boiling a kettleful of the brine over a fire as related in the

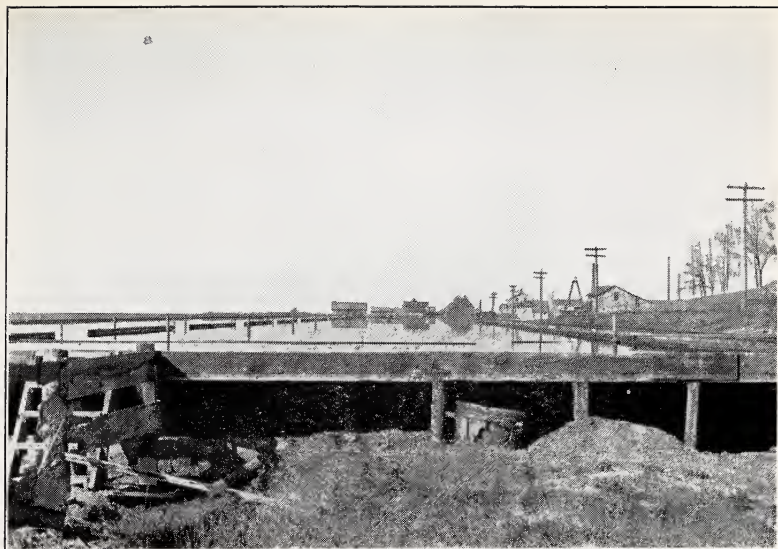
"Relation" of Father Lemoyne, who went on a mission to the Indians in 1654. From this time the Indians refined salt in small quantities and sent it, with fish and skins, to the trading posts. As the tide of immigration flowed into this section the early settlers bargained for the right to make salt on the ground on one side of Onondaga Lake by the treaty of Fort Stanwix in 1788. In 1797 the State of New York purchased the salt reservations along the lake from the Indians and rented certain tracts to producers. The systematic manufacture of salt was thus started and the works have been in operation up to July, 1926, when Mr. Gale, the last operator, shut down his plant for good. Millions of bushels of salt, netting the state an immense revenue, were produced, for a long time almost monopolizing the salt trade of the country. Various methods were used here, but the two most important were boiling and solar evaporation.

In 1797, the industry was fairly well started by the boiling method, but the large commercial plants did not start until about 1841 and the father of Mr. Gale started in 1851 with both the boiling and solar evaporation methods used. In time the evaporation in the sun superseded the boiling method and toward the end had entirely crowded the former method out.

The state owned, by purchase from the Indians, all the brine wells from which they pumped the brine by means, first of large windlass chain and bucket hand pumps and later by steam piston pumps, to the various operators who had engaged to manufacture salt. The operators paid for this by a tax on every bushel of salt sold, which was carefully checked both by the operator's clerk and by a salt inspector.

This brine was received in large reservoirs or cisterns which form a necessary part of each plant. In the plants for making solar salt a large amount of open space is required. Here are erected acres of shallow wooden "covers" or vats open to the sun and set upon rows of posts from three to eight feet above the ground. Mr. Gale's plant covered about 20 acres. From the receiving cistern the brine flows by gravity down to or is pumped up to the first series of vats called "aprons," "deep rooms" or "decks," where the brine spreads over a large surface dropping the most soluble impurity of the brine, oxide of iron, in the form of brownish-red powder, crusts and lumps called there "bitterns," probably from the very bitter taste. From

these "decks" the brine flows very slowly over a series of long shallow vats where further evaporation drops other impurities such as lime, etc. From the lowest corner of these vats toward which the brine drains are cut several circular holes by means of an auger with a screw bit fitted with an adjustable extension arm with a cutting bit which circumscribes and cuts a circular hole. These holes are cut to fit the outside diameter of a wooden pentstock to drain off the brine to the wooden pipes leading to the final evaporation vats or to drain off the brine to underneath cistern when it rains so that the process of evaporation will not be retarded by the addition of the rain water. From these underneath cisterns the brine must be pumped back again to the shallow vats after the weather clears. The pentstocks fitted in these holes are stopped with a big wooden plug or cork shaped very much like the round glass stoppers in the old-fashioned perfume or toilet water bottles. Some of these pentstocks lead to the wooden brine pipes that convey the brine to the vats for final evaporation. These pipes are cut into sections of from five to twelve feet long with a hole 5-7-9-12 inches in diameter bored by means of a pod auger in the same manner wooden pump trees are bored in Bucks County. The boring is done from both ends. One end is trimmed to a blunt point by a reaming tool composed of a plug that fits in the bored hole of the log and two extended arms that fit over the outside of the log with two diagonally set blades which trim off the outside of the log as the tool is turned in about the same manner that the older type of pencil sharpener worked. The other end of the log is belled by means of a similar tool, also with a plug that, however, is pushed farther in the log, with a single tapering diagonal arm set with a blade that enters the already bored hole and trims out the wood something like the scraper does in the modern ice cream dipper. The blades on both of these tools are adjustable so as to cut correspondingly that the pointed end of one log might fit tight in the belled end of the log ahead. The logs in our collection are yellow pine but the favorite used was "Pepperidge" or the Sour Gum (*Nyssa Sylvatica*). It takes thousands of wooden sections to carry the brine of a plant. Mr. Gale thought he had about 19 miles laid. As they get encrusted with salt inside and pretty well covered with it outside from leaks and drippings from the vats above they do not rot away



EVAPORATING VATS

Another view of "Salt Rooms" where final evaporation takes place.



HORSE-DRAWN RAKE AND ANCHOR OR SCRAPER

To draw salt to the edge of the vat for loading, with the anchor or pulley set on edge for horse to draw at right angles to the line of scraping. The covers of vats are shown in background.

and look as if they would last forever. Many of the logs get so crusted with salt inside that they stop up entirely when they are cleaned out with a long handle with an oval blade set at right angles to the handle like a long handled oven scraper and a chisel pointed iron rod.

The vats to which these wooden pipes carry the brine are shallow frames about 6-8 inches deep and 16 x 18 feet in size set up, as I said before, on posts 3-7 feet high. In a single plant are many hundreds of these vats, covering acres of ground, set side by side along narrow "streets," only wide enough to permit a two-wheeled cart to pass along. Mr. Gale and I went around the plant in a four-wheel buggy of the cut under type as no other four-wheeled vehicle could make the turn at street intersections. It was interesting to notice Mr. Gale's old horse, which he had used for this purpose alone for over 15 years, make the turn at these intersections. He had gone around so much that he knew exactly what to do without any guidance from his driver other than a simple pull of the rein to direct him when we wanted to turn. Instead of turning at once in a semi-circle, he would keep on almost across the intersecting street, then turn at right angles, cutting the inside front wheel under the body and pivoting the rear wheels without touching the vats on either side.

Each vat is covered by a sloping roof with the ridge pole parallel to the front made of unplanned boards about 8 inches wide with a similar board nailed over each joint to still further prevent rain water seeping through any cracks that might occur or develop. This roof is movable. On each side of the vat, running at right angles to the front, is a wooden track made by two flat parallel strips about two inches wide divided by a third strip which rises about two inches higher between the flat strips. These tracks extend back of the vat a distance as great as the side of the vat. On each of these tracks are placed two wooden spools or rollers with flat sides eight inches in diameter and about one inch thick connected by a spindle an inch thick and about two inches long. The rollers are placed about the width of the vat apart and on them is placed the vat roof by means of a track along each side which is like the track on the vat except that it is inverted. By means of these rollers the roof may be run quickly and easily off the vat and back on the extension of the track in the rear. During the day and even at night when

the weather is clear these covers are run off the vat so that evaporation may go on unchecked, but at the first sign of rain, a bell, hanging at the top of a high scaffolding or on a pole in the center of each plant, is rung and every man, woman and child on the place hastily drops whatever else they are doing and rush to push the "covers" over the vats. The presence of fresh water in the evaporating "pickle" is very disastrous to a crop and every precaution is taken to guard against a fall of rain into the vats.

As these rollers sometimes break, a heavy wooden handle about six feet long with a slightly upturned blunt iron point is used to raise the roof high enough to take out or replace a roller. This handle has a heavy board two inches thick and fifteen inches long swiveled to it a short distance back of the point at right angles to the handle, something like the modern can opener, which acts as a fulcrum in raising the roof.

Various tools are used in working over the salt now forming in the vats. The Spud, a chisel-shaped iron blade three inches square on a long wooden handle, is used to break up crusts, bitterns, etc., in the spring before starting operations. The Breaker Spud, a narrow iron blade, 12 inches long and an inch wide, set at right angles on a long wooden handle, is used to break up the crusts on the salt as it forms. The Leveling Rake, much like a garden rake except that each iron tooth has a round iron button on the point, to level off surface of salt after using the Breaker Spud or after some of the salt has been taken out to the storehouse. The Muddle Rake, a wooden blade, set at right angles to the handle, edged with a narrow iron blade so that it will not gouge the floor of the vat or scratch up splinters, is used to clean off the last layer of salt in the vats in the fall before closing down for the season. Finally the Hand Rake, a blunt iron blade 14 inches long and 4 inches wide, set at right angles on a wooden handle and the Horse Rake, a larger iron blade, 3 feet long and 10 inches wide with two wooden handles like cultivator handles attached to the top, both used to pull the salt to the side of the vat in taking up a "crop." The Horse Rake has two chains running from each end of the rake and meeting in an iron ring. A rope is fastened to this ring passing through an iron pulley or "trolley" set on the street side of the vat so that the horse can pull up the "street" at right angles to

the direction the rake is being operated in pulling all the salt to this "street" or loading side of the vat.

A crop now being formed in the vats it is worked over with the Breaker Spud and the Leveling Rake and then drawn to the street side of the vat by the Hand or Horse Rake. Here it is shoveled into wooden tubs about the size of a bushel basket. These tubs have a six-inch peg at each side for a handle. On the bottom and about half way up the sides, holes one-half inch in diameter are bored so that the water, shoveled up with the salt, will drain off. The tubs are set on the curb of the vats until thoroughly drained and the salt is emptied into a large, heavy, two-wheeled cart with high flaring sides to be hauled to the storehouse. At Mr. Gale's plant this storehouse was built against the side of a high bank with the second floor of the house on the level with the top of the bank so that the carts could be driven into this second story and the salt dumped down a wide chute unto the main floor below.

The salt was screened for sizes through a circular iron frame work covered with different size wire mesh. Some table salt was made by grinding the coarser product between a heavy stone roller running over a stone base, both set in a wooden frame and driven by means of a steam engine. Most of this commercial salt was shipped in bulk by canal or railroad. For loading, a particular type of wheelbarrow was used something like the modern metal cement wheelbarrow with the front side extending farther over the wheel so that when loaded a good portion of the load was over or ahead of the wheel thereby taking most of the strain off the workmen. The wheelbarrow loads of salt were counted as they passed out of the store house and the tally was kept by means of a wooden frame work, four feet high and two feet wide, holding wires on which were strung a number of wooden washer like discs, alternated every third, fifth or seventh disc by an iron one which was used as a check, for every third, fifth or seventh man should check on an iron disc, and if he did not they stopped loading until the checking was corrected. This counting and checking was done not only to tell how much salt was being loaded and sold but also to determine the tax the plant should pay the state figured on the number of bushels sold of one cent a bushel of 56 pounds on all the salt made from brine furnished by the state to the manufacturers.

The slower process of solar evaporation, resulting in the larger crystals, gives solar salt its distinct value and use; but an entirely different method is employed in manufacture of finer grades for table use. For this purpose, a "block" is used, consisting of a long double row of large, iron kettles, set side by side in substantial brick arches which practically forms the great flue of the furnace placed at one end or by long rows of these heavy iron kettles hung under brick arches with open fires underneath. The brine is drawn into the kettles from the receiving cistern where certain of its impurities have already been precipitated by the addition of a certain amount of quicklime or alum. Other impurities that form while boiling, such as chloride of lime and the so-called "bitterns" are extracted after the fire has been started for a time by a large, flat, iron pan, furnished with a long handle, placed in each kettle, completely covering the bottom of the kettle. As the brine is boiled down, the impurities fall into these pans, which are carefully drawn out, leaving the salt as clean as possible.

Boiled salt, from rapid evaporation, is of fine grain; but the grain is further "cut" by the addition of a small lump of butter or tallow, which, melting and spreading over the boiling brine, serves to break the crystals as they rise. When the salt begins to form, it is dipped up and put to drain in a large splint basket, or in our case, in the wooden sieve like tubs, which are placed on a broad plank over one side of each kettle.

This is the much shorter process of manufacturing boiled salt; for, after draining the prescribed time it is ready for market. The finer grades of table salt are obtained by putting the boiled salt through the grinder mentioned before.

All these tools here described are in our museum with the exception of the flat pan used to take out the impurities from boiled salt and the large splint draining baskets, the latter of which Mr. Gale did not use and the former had been thrown away a long time ago as Mr. Gale had not made boiled salt for many years. He did have several of the large kettles used in this boiling of brine still around his yard and we have one now in the museum.



SALT TUBS WITH PERFORATED BOTTOMS

Set on edge of the vats to drain off preparatory to loading.



THE SALT CART

The wide, heavy dump cart collecting the salt from the vats and hauling it to the storage house.

Sesquicentennial Anniversary of the Battle of Crooked Billet

Report of the Celebration of May 5, 1928

By WARREN S. ELY, DOYLESTOWN, PA.

(Doylestown Meeting, January 19, 1929)

AT our Annual Meeting here at Doylestown one year ago, Dr. John B. Carrell, of Hatboro, on behalf of the Montgomery County Historical Society, requested our Society to join with that Society in the celebration of the 150th Anniversary of the Battle of the Crooked Billet, fought partly on Bucks County soil May 1, 1778.

The proposition was accepted and later a committee of three members, Hon. Harman Yerkes, Wilson Woodman and Warren S. Ely, was appointed by President Mercer in reference to the matter.

Judge Yerkes was taken sick prior to the date of the first meeting of the joint committee at Hatboro, and was unable to attend the meeting and died a few weeks later without being able to attend any meetings of the committee.

This was especially unfortunate inasmuch as Judge Yerkes, born on the site of the battle, had always been deeply interested in preserving its history and recalled conversations and discussions of the event held by members of his family and others who had witnessed the battle, in his home, and had gathered and preserved an account of several incidents connected therewith, and looked forward to rendering active assistance in the celebration.

Wilson Woodman attended but one of the meetings of the committee, alleging his age and infirmities, and want of knowledge of the history of the battle, made it impossible for him to assist in the work of the committee.

These circumstances threw all the preliminary work on the remaining member of the committee, and he was unable to influence any other members of the society to take an active part in preparing for the preparation for the celebration, except our Secretary, Mr. Mann, who attended several of the later meetings and gave valuable advice.

I attended every one of the weekly meetings of the committee until the program was completed.

The history of the battle from various sources was thoroughly reviewed and the actual site of the conflict definitely ascertained and a map of the surrounding country, showing route of approach of the enemy, location of General John Lacey's headquarters and troops, route of retreat and battle, homes robbed by the British, scenes of the conflict, burial places of patriots, Washington's Camp at Neshaminy, and roads connecting the various points, was prepared by A. C. Young, a competent engineer and surveyor, and is reproduced in the program, which contains Gen. W. W. H. Davis' History of the Battle and a summary of other data from various other sources collected by the Committee.¹

In the selection of the site of the marker and securing the granite monument and its erection, I had the active co-operation and assistance of Howard T. Hallowell, of Jenkintown, who was indefatigable in this part of the work as a member of the committee.

The Montgomery County Historical Society did not render us any assistance, as a society, financially or otherwise, but members of the society residing in and about Hatboro, contributed liberally both in work and funds.

I wrote several times to the Cumberland County Historical Society in reference to participating with us in the Anniversary and also in reference to the participants in the struggle from that county, but though the secretary seemed to be much interested on receipt of my first letter, never gave us any assistance either in data or funds.

I had considerable correspondence with F. D. Beary, Adjutant General of Pennsylvania, in reference to the State assisting in the marking of the sites of the burial of the soldiers, but the conditions of state aid were such as we could not accept.

We finally purchased a granite slab and had it erected on a lot 24 by 40 feet, purchased of Rudolph Tanner, on the southeast side of the Jacksonville Road, 1910 feet from the County Line.

The purchase price of the lot was \$50, which was contributed by the Bucks County Historical Society, and the deed

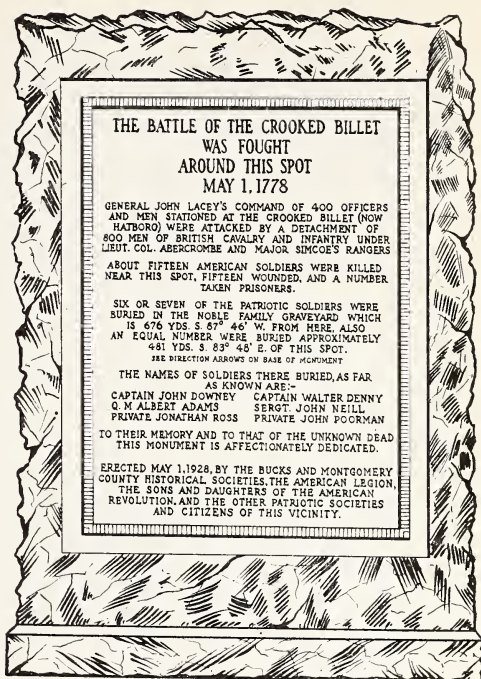
¹ For General Davis' "The Battle of Crooked Billet," see Vol. II, page 173, of our publications.

made to the Society by Mr. Tanner and his wife has been duly recorded. The cost of the shaft and its marking and erection, approximately \$360, was paid out of voluntary contributions by individuals.

The dedication of the monument and the celebration of the anniversary took place on May 5, 1928. There was a large concourse of people at the dedication. Music was furnished by Hatboro Cornet Band. Prayer was offered by Rev. B. M. Gemmill, D. D. The tablet was unveiled by Dr. Charles

D. Levingood, of Berwyn, Pa., a lineal descendant of General John Lacey, who later in the program delivered an address. The dedicatory address was delivered by Hon. Webster Grim, of Doylestown. This was followed by the reading of an original poem by its author, Mrs. Findley Braden, of Doylestown, entitled "Brave Lacey and His Rebs." Two memorial trees were planted on either side of the monument under the supervision of the Junior Nature Club, by young girls, members of the Club, with suitable ceremonies. A prayer was offered by Isaac Michener, a minister of the Society of Friends. The exercises closed with the singing of the Doxology by the audience and the firing of a salute "To Fallen Comrades of All Wars," by representatives of the American Legion Post at Hatboro.

Dinner was served at Pennypack Lodge and Tea Room, Dr. John B. Carrel acting as toastmaster, and addresses delivered by Lieutenant Frank Schoble, the blind World War veteran, and Irving P. Knipe, President of the Montgomery County Historical Society, and Judge Harold G. Knight, both of Norristown.



A pageant was enacted on the grounds of Hatboro Union Library by members of the Junior Neighbors of Hatboro in Colonial costumes depicting a Quaker wedding and Lafayette receiving his commission as General from General Washington.

A parade participated in by a number of local organizations and several hundred school children from Bucks and Montgomery Counties, including a number of unique floats representing Colonial and Revolutionary times and events. A meeting was held at the Hatboro Crooked Billet Monument erected in 1860, and addresses were delivered by Lieutenant Schoble, Hon. Henry W. Watson and William Fletcher Stites.

The Hatboro people gave the whole affair very hearty and substantial support.

The Official Program, containing, as before stated, General Davis' History of the Battle and other data in reference to its history, the map before referred to and many views of the houses and sites that figured in the history of the battle, has been preserved, and a fairly full account of the anniversary appears in current numbers of the Hatboro *Sprit* and Doylestown *Daily Intelligencer*.

ADDRESS OF HON. WEBSTER GRIM OF DOYLESTOWN, PA.

At the unveiling of the monument to mark the site
of the Battle of Crooked Billet, May 5, 1928

We are assembled on this field of glory to dedicate a monument to the valor of the patriots who here died that liberty might endure. Upon this very spot, one hundred and fifty years ago, they fell, in defence of the principles proclaimed in yonder city. And surely no patriots in any age or clime died more gloriously. Surprised and surrounded, they refused to surrender. They retreated, they rallied, and they fell with their faces toward a stronger foe. The story of Concord and Lexington was here retold on Bucks County soil. It is well therefore that we raise this monument to their memory.

Within the confines of this peninsula washed by the Delaware and the Schuylkill were enacted more stirring events than in any other like territory on this continent. In yon city, so soon to feel the oppressors' heel, the Continental Congress had proclaimed that these colonies are, and of right ought to be,

free and independent states, and they mutually pledged to each other their lives, their fortunes and their sacred honor. From the patriots' camps in this County went forth the victorious columns that won at Trenton, Princeton and Monmouth. Here Germantown was fought and won, and then lost. Yonder lies Valley Forge, the Gethsemane of the Revolution. To our rear is the spot where the stars and stripes, that beautiful emblem of Liberty and Union, were first unfurled in the American army. Here too that constitution that cemented a nation into being was adopted and sent forth for ratification. Not that any great battles were here fought and won by us, because there were no great battles won by us in that war, but because by these victories the spirits of the patriots were cheered when all also seemed lost.

We are apt to think that the progress of our race depends upon the issue of great battles fought and won, and it is true that decisive battles have changed the face and fortune of kingdoms. But not so in the war of the Revolution. No one, no two great battles could determine our freedom. Long Island and Brandywine could scatter our forces, but they could not conquer America. Discouraged and disheartened as were the patriots, the star of hope still shone resplendent, and it only needed the victory at Trenton to justify that hope. The very fact that Howe and his generals decided upon a like policy in this engagement at the Billet is proof positive that they recognized that these colonies could not be subdued by pitched battles or by captured cities, and Howe soon thereafter retired to New York. The words of that great friend of America, William Pitt, to his fellow Englishmen, that England could not conquer America, encouraged the hopes of the patriots and was worth more to them than regiments of soldiers. For the strength of these colonies did not depend upon the size or equipment of her armies. It depended upon the indomitable spirit of the patriots backed up by a fast developing interior, for while the patriot carried the rifle in his right hand he was guiding the plow with his left with the result that we were stronger at the end of the war than when we began. This development could not have been accomplished if our armies had remained mobilized, even if Congress could have found means to support them, but when some great emergency arose, as it did at Boston, at Saratoga and at Yorktown, the sturdy yeomanry left the plow in

the furrow in the valley and the axe upon the hillside and joined in one supreme effort, and when that work was accomplished they returned again to the valleys and the hills as quickly as they had come. It might have contributed to the glory of our arms had we been able to win a pitched battle against the British regulars, but it must have been at a frightful cost of blood and treasure, for England had more and stronger armies which she would have placed with us and our last situation would have been worse than the first. As time goes on the great generalship of Washington in these campaigns becomes more marked and we no longer wonder at the great tribute paid him by Frederick the Great. To conquer America, it would have been necessary, to quote the words of Patrick Henry, to "place a British Guard in every house."

We are accustomed to hear that it was the intervention of France which secured for us our independence. Grateful as we are to France for her great aid in our time of need, we yet would have won our independence without her. The people of England were tired of the war: we were growing stronger monthly and yearly, and the Government of France was more concerned in breaking the power of her old rival, England, than she was concerned about our welfare, as subsequent events soon showed.

It is not my purpose to rehearse any of the events of that May Day battle. Others will do so. The story has been told and retold by our eminent Bucks County historian, General Davis, whose ancestors lived in this immediate community, and he got some of his information from the lips of persons who were present at this battle, and they have been supplemented by the research of our present-day historian, Warren S. Ely, whose knowledge of the history of our county is not equalled by any man in his generation. Suffice it to say that both Washington and Howe regarded this as strategic territory. We of Bucks County blush with shame to repeat that here almost within sight of the Cradle of Liberty, almost within hearing of the Liberty Bell, there were more loyal followers of King George than in any other part of our Colonies. There were here many men who were trading with the enemy, giving them aid and comfort. So much so that General Lacey was moved to recommend that this whole region be depopulated to prevent them from feeding the British Army. And Washington was obliged

to place the territory under martial law to break up the practice. And Howe could encourage this disaffection by placing here armed forces and more particularly could he contribute to it if he could bag the forces of General Lacey and lead them prisoners to Philadelphia, thus offsetting Trenton. Had Abercombie and Simcoe succeeded there would have been many more confiscations here at the close of the war than there were.

War at best is horrible. But it is still more terrible when the participants are actuated by revenge over some real or fancied wrong, and many of the atrocities, murders, saberings and burnings of that day must be attributed to this cause, but whatever the cause, they form with the massacre at Paoli, a very dark blot upon the otherwise bright escutcheon of boasted England's glory.

It is the purpose of these societies in erecting this monument to dedicate it to the valor of the men who here died that free government might be established, and secondly to mark the spot where the only battle was fought on Bucks County soil: to remind the present and rising generation, and generations yet unborn of the sacrifices here endured to the end that they might the better appreciate the heritage vouchsafed to them through these sacrifices. And upon this monument encased in enduring brass, the Bucks County Historical Society has placed the compass of the surveyor, pointing like the finger of a guardian angel to the spot of supreme sacrifice, the very spot where these men, some living, some dying, some dead, were ruthlessly burned in a vast funeral pyre, that all who run may read the story of that sacrifice.

The wayfarer, uninterested in the sacrifices here endured that he might enjoy the blessings of free government, will pass this spot unheedful of its presence: the more worthy descendants of patriotic ancestry will pause and perchance gaze in wonder upon the surrounding terrain: but the true American will approach this shrine with reverence and reflect upon the sacrifices not only here endured, but also of those of the other men and women of that day whose sacrifices have laid the foundations of this mighty nation.

Heroes of old, though dead, we salute you! And as we raise this memorial to your valor we pledge ourselves anew, that the principles for which you suffered, bled and died, shall not perish from this earth.

Visit in Durham Township of a Political Refugee from Brazil

By DR. B. F. FACKENTHAL, JR., RIEGELSVILLE, PA.

(Huffnagle House, New Hope Meeting, June 22, 1929)

WHILE this is not an historical paper, it relates to the county of Bucks, which is my apology for presenting it. In the year 1895, 34 years ago, a political refugee from Brazil, a woman, found asylum at Durham in the upper end of this county. She traveled incognito under the name of Madam Ferreo; she was accompanied by a maid who always addressed her (in Portuguese) as "Your Majesty." This maid could speak no language but Portuguese; she became homesick and at the end of a week or ten days was sent back to Brazil.

The "Madam," by which name I will hereafter in this paper refer to the refugee, guarded her name and title with such care that we failed to discover them, but all indications pointed to the fact that she was a close relative of Emperor Dom Pedro II. She remained in Durham about a month, and during the entire time was in constant dread for fear that the Brazilian legation at Washington would learn of her whereabouts, and have her placed under arrest.

Dom Pedro II was crowned Emperor of Brazil July 18, 1841, and after a reign of more than 47 years, he was in 1889 forced to abdicate, due to a Revolution instigated by the officers of the army, and on November 15 of that year, a republic was proclaimed, and on the following day the royal family was placed on a steamer and ordered out of the country. There had been several uprisings among the following of the different factions of the new republic as well as insurrectionary efforts to have the monarchy restored, the last one in 1894, in which it appears that the Madam was one of the leaders. Dom Pedro had died in Paris in 1891, and her efforts were directed toward having his grandson placed on the throne of Brazil. The scheme failed, the revolutionists were attainted of treason, and the life of the Madam placed in jeopardy. She finally succeeded in escaping, hiding in out-of-the-way places, and with the protection of sympathizers finally reached the seaport of Bahia, about 800 miles

from Rio de Janeiro, the capital of Brazil, where she took passage for New York.

On that steamer Miss Matilda D. Spilsbury, who had been doing missionary work in Argentina, was traveling from Buenos Ayres to Durham, via New York, and was an eye witness of the embarking of the Madam who was escorted to the steamer by a large throng of noisy people, accompanied by a brass band. Miss Spilsbury reported the excitement on the dock as being most intense. On the boat the Madam became very seasick, and Miss Spilsbury, who could converse with her in both French and Italian, acted the part of the Good Samaritan, and they soon became good friends.

Miss Spilsbury was a woman of about sixty years, and the Madam was doubtless of about the same age. She seemed younger, having jet black hair. Mr. E. Gybbon Spilsbury, brother of Matilda, thought she was older, and was uncharitable enough to say that she dyed her hair. Her face and neck were always white with layers of powder. I fancy that many of you ladies have seen the manner in which women of the Latin American countries powder their faces. Mr. Spilsbury often referred to her pleasantly as "The Begum."

The Madam was much distressed on her arrival at New York, dreading to go to any of the hotels for fear of being discovered, whereupon Miss Spilsbury invited her to accompany her to Durham. The Spilsburys were English people, who had lived in France for some years, and spoke French like natives. Their home was in Trenton, but they were spending the Summer and Fall in what we called "The Raymond House," at the Durham Iron Works, while we (Mrs. Fackenthal and I) were living in the manager's house at the same works, located about 600 feet distant, but across the valley on the opposite side of Durham Creek.

Being close neighbors and old-time friends we naturally saw a great deal of them and their newly arrived guest. This was before the days of automobiles, and Mrs. Fackenthal showed them much attention, driving the Madam over the beautiful hills of Durham and through the picturesque valley of the Delaware. On one occasion she gave her and the Spilsbury ladies a luncheon at Paxinosa Inn on the summit of Weygant Mountain above Easton; on another occasion she gave her a dinner in our

home, with ten plates, to which she was careful to invite only those who could carry on the conversation in French, for the Madam could speak no English. Mrs. Erissmann, daughter of Martin Coryell, and her daughter, Cammile, who were in America on a visit from Geneva, were among her guests.

After dinner Mrs. Erissmann had a long talk with the Madam, and later said to us, "She is a Bourbon sure enough." The Madam, who usually dressed in black, wore a white costume at this dinner. My sister, Katharine, who had just graduated at Wellesley College, was also a dinner guest. The Madam told her that she had visited Wellesley College in 1876 with Dom Pedro and his party. Knowing that all visitors were expected to register their names, I wrote to the college with the view of finding out the personnel of Dom Pedro's party, but alas their historical building was destroyed by fire in 1914, and with it the registry.

The Madam made no secret of the fact that she was one of Dom Pedro's party when he visited the Centennial Exhibition at Philadelphia in 1876, and which was the real objective of Dom Pedro's visit to America at that time. The Empress came to America with him; she was Theresa Christina Maria, daughter of Francis I, King of the two Sicilies.

The Madam had very little money with her, and to get funds was obliged to part with some of her wonderful jewels, of which she had many, having exhibited them to Mrs. Fackenthal. She carried them in secret pockets in her skirts. A twentieth century maiden could not do that today. She gave several jewels to the Spilsburys, which Miss Beulah Spilsbury, now of Minneapolis, then a child of about eight, advises me she still has in her possession. She presented Mrs. Fackenthal with several articles, one, a hand-painted photograph holder, folding in three parts, like a fire screen, which she said was one of her most cherished possessions, as it had belonged to Marie Antoinette. I will exhibit this after the conclusion of this paper, for it will certainly interest the ladies. It will be noticed that one of the paintings is signed by the artist.

The Madam invited Mrs. Fackenthal to visit her in Italy, where she said she owned a large palace. I wondered at the time why I was not also invited.

After spending about a month in Durham she announced

her intention of going to New York on a certain Monday morning with Mr. Spilsbury, on the pretext of doing shopping, but on reaching New York she soon vanished from his care, and that was the last heard of her until some years later when Miss Spilsbury came across her accidentally in Brussels, where she was living quietly without fear of apprehension.

It is to be regretted that these recollections were not written up thirty years ago, when the chief actors of my story were still with us. I have, however, sent out inquiries which should bring me some reliable information to show who this royal personage was, and such additional data as I can gather will be added to this paper when it appears printed in the next volume of our publications.

NOTA BENE—Inquiries addressed to Rio de Janeiro, and to the Brazilian Ambassador to the United States, both received courteous replies, but they failed to throw any light on the identity of this refugee.

The New York *Tribune* of April 17, 1876, gives the personnel of Dom Pedro's party coming to the United States, thus:

"The members of the imperial party are Dom Pedro II, Emperor of Brazil, and the Empress, Theresa Christiana; Visconde de Bon, Ratiro Chamberlain; Buchard Arthur de Mecedo, secretary; Dr. Lonja Fontes, physician; Josefina da Fouseca Costa, lady of honor; Dr. Charles Henning, interpreter; Petro Antonio du Paind, steward; Lionidid Espozel and Joanna d'Alcantara, ladies in waiting, and four servants."

It is likely that the Lady of Honor may have been the Madam referred to in this paper.

Peddlers and Other Itinerants

By JAMES H. FITZGERALD, MECHANICS VALLEY, PA.

(Huffnagle House, New Hope, Pa., Meeting, June 22, 1929)

THE subject matter of history is everything that undergoes change, and a record of the activities and experiences of past ages often serve as a guide in the solution of current problems. Modern methods in the production of raw material and the invention and use of machinery wrought many changes. There has also been a change in the distribution of the finished article. The modern mail-order house is the development of the idea in the mind of the peddler laboriously wending his way with his pack.

The peddler was successful because he went into the homes to display his goods. The mail-order house sends pictures of nearly everything it has for sale. Psychologically the peddler had one advantage, as a purchaser prefers seeing an article to seeing a picture of it. Department stores recognize the value of displaying their wares. Large windows of plate glass are dressed with seasonable goods. Entering the store, we see samples of nearly everything on sale displayed on tables. The old-fashioned counter behind which the goods were stored in bins, drawers, boxes and barrels have been discarded. The village store has fallen into line.

The first peddler I can recall was Bernard McCoy, whom we called "Barney." This was in the early seventies. He was a bachelor and made his home with relatives in Bristol, Pa. He did not travel during the winter months. He carried a carpet bag satchel slung over his shoulder on a stout cane. His stock of notions were of the very best quality, such as village merchants did not carry. One of his specialties was cotton half-hose for men and stockings for women and children. He called on his regular customers only and covered a large territory in eastern and southern Bucks County. One spring we missed the genial "Barney" and his almost immaculate white linen suit and another peddler, Daniel McGill of New York City, informed us that "Barney had died on the way." We subsequently learned that he was taken ill suddenly near Doylestown and died a few days afterward. During that decade (1870-1880)

two peddlers from New York City, Patrick and John Cusack, visited the upper end of the county. Their specialties were Irish linens, dress goods and cloth suitings for men. They also carried samples and solicited orders which were filled from New York and sent by express. They were good salesmen and reliable, and were given the hospitality of our home. Before taking leave they paid for entertainment in goods. On one occasion a peddler named Martin Flaherty became ill and my mother quickly gave a correct diagnosis and placed him in quarantine; within a few days she had several patients to care for as the peddler's malady was the mumps. About the year 1880 the peddlers of tinware came. They were foreigners and could speak and understand very little of our language. One of them carried a bulky pile of tin ware which my father said weighed more than 100 pounds.

Thomas Trower (1790-1865) who lived near Cross Keys, Buckingham Township, was a successful Bucks County peddler. From his will, filed November 18, 1865, we learn that he left an estate valued at \$28,403.88. After making a few minor bequests including \$200 to "The Mennonite Society of Doylestown for sheds for the accommodation of its preachers," he directed that the balance of the estate be held in trust for his wife, Magdalena, the interest to be paid to her, and upon her death the principal remaining be paid to the "Managers of the Pennsylvania Institution for the Instruction of the Blind."

Mrs. Thomas Trower died November 8, 1886, and the final settlement of the estate was filed on February 14, 1887, showing a balance of \$25,143.85. Thomas Trower and his wife, Magdalena, were buried in the Mennonite Meeting graveyard, Doylestown, where their graves are marked.

John Riegle and Benedict Saddler of Upper Black Eddy were fishmongers. They caught their fish in the Delaware River and its tributaries in the vicinity in which they lived. Mr. Riegle was an expert in all the ways of catching fish and was noted for his hardihood and adventure. His tall and angular form with his strings of cat fish, eels or suckers can be recalled to this day by many in Milford, New Jersey. Benedict Saddler, "Benny" as he was called, had a horse and wagon and supplied his patrons on the Pennsylvania side of the river. Like Joyce Kilmer's fisherman they "loved to fish"; but they were abstemious.

The County fairs brought a large number of hawkers, and public vendues were attended by men supplying oyster soup. During recent years candy, sandwiches, tobacco and cigars have also been supplied. A familiar figure at these sales was Jacob Fretz, known as "Peanut Jake." Other peddlers were Henry Souder of Rockhill; John Derstine of Hilltown; Niles Martin of Yardley, and Joseph Meltzer, with horse and wagon, who sold crockery. Hugh Moore, a book agent of Bridgeton Township, was successful in his line. Other itinerant workers were: medicine vendors, tinkers, umbrella-menders, tailors, saw-sharpeners, scissors-grinders, watchmakers and broom-makers.

Residents of Doylestown recall the medicine vendors. The Kickapoo Indians: "Doctor" Long and "Doctor" Fortner and others. As a preliminary to making sales of their remedies the management of the Kickapoo Indians gave a free entertainment in Lenape Hall at State and Main Streets, Doylestown. Some of them had stands erected on the plaza of the Fountain House and used oil or gasoline lamps for illumination. "Doctor" Fortner was well known in Bucks County towns and in Philadelphia. He was a member of the House of Representatives from Philadelphia for several terms. To Irvin M. James, Justice of the Peace, Doylestown, I am indebted for the following extract from one of Fortner's advertisements:

"The cholera came in '62
When remedies were scarce and few,
Men, women and children dying every day,
While some to escape went far away.
When Fortner came relief in hand
To drive the cholera from the land."

Musical itinerants providing open air entertainments came to Bucks County. They attracted crowds and after giving creditable performances took up a collection. There was the one man band. He played a clarinet or other wind instrument and at the same time, with the use of pedals, beat a drum and clashed cymbals. The organ grinder with a monkey never failed to amuse. While popular airs were ground out, the monkey held on a long leash would caper and climb walls or porch columns. The little animal wore a red cap which it was trained to use in collecting coins. "Dot leetle German band" should not

be forgotten. Before leaving a town or village, the tavern was given a serenade and the landlord invited the performers to the bar where a round of drinks was served.

Strolling minstrels and musicians are found in all lands. When the fiddler enters a "townland" in Ireland he plays the lively air "Cannie Soogah" (Jolly Peddler) and always receives a "Cald Millia Failtah" (hundred thousand welcomes). Oliver Goldsmith, M. D., (1728-74), the Irish poet and dramatist, related that he made a tour of the continent of Europe playing a flute. "All went well," said he, "until I reached Italy, where nearly every one was a better musician than I." Here the religious houses were opened to him and his talent in disputation, characteristic of his race, won him awards in universities in maintaining a thesis.

A law was passed to restrict the activities of peddlers. This was "an Act relating to hawkers, peddlers and retailers in the County of Bucks. Approved the 22nd day of March, 1862, by A. G. Curtin, Governor." This Act prohibited "the hawking and retailing by any person or persons of any goods, wares, or merchandise, unless he, she or they shall keep a store, shop, yard or other fixed place for the purpose where the same shall be sold or exposed for sale." A fine of \$50 was imposed as a penalty for the violation of this act. The Act further provides "that the provisions of this Act shall not be construed to apply to persons carrying goods for wholesale purposes or to persons vending or disposing of articles of their own growth, produce or manufacture." One-half of the fine goes to the informer and the other half to the County of Bucks. During the early nineties a number of prosecutions were brought before Justice of the Peace, Willis Wall, of Doylestown, on information given by Peter H. Morris of Newtown, Pa., a dealer in clothing and men's furnishings. Before any warrant was applied for Mr. Morris warned the offenders and when there was a conviction he waived his claim to one-half of the fine. The peddler was then obliged to pay only \$25 to the county and the costs of prosecution. During the past year (1928) two arrests have been made in Doylestown on information given by the borough police. One case was dropped and in the other the peddler paid the county \$25 and costs and by agreement gave his stock to the police as their reward.

The idea of securing this protection to local dealers was not, however, a new one. In the Middle Ages we find that the merchants' guilds in the towns of England had a monopoly of trading and had the power of fining all traders who were not members of the guild. Every trade, art or craft had its guild in nearly all the countries in Europe. Plutarch writes of them in Italy and they were numerous in Germany early in the twelfth century. Here was the origin of our apprentice system. Apprentices served from 3 to 10 years and were obliged to pass an examination before they could become masters in their crafts. A German writer tells us that the 13th century was the golden age for labor.

I wish to relate here some reminiscences of my father, James Fitzgerald (died May 27, 1892, aged 74 years). He was born in Wexford, Ireland, and emigrated to America in 1839, landing in Philadelphia. Until his marriage and permanent settlement in Upper Black Eddy, Bucks County in 1851, he was a journeyman shoemaker. In those days a farmer would have the hides of the cattle he slaughtered tanned and engage a journeyman shoemaker to come to his home and make footwear for his family. The shoemaker was provided with board and lodging. There were a number of tanneries in New Jersey and Pennsylvania. One of them was conducted by the Kachlines in Frenchtown, N. J., the Kachlines also operated a tannery in Durham Township, which was begun by Solomon Bachman about 1830. Many of the tools used in this tannery are in the museum of the Bucks County Historical Society. Other tanners were John Gilbert of Holicong and three generations of Atherholts, David, Joseph and Aaron, who conducted a tannery in Haycock Township. There was an early tannery in Nockamixon Township, on the Durham Township line; the earliest information we have is that it was carried on by Richard Backhouse of Durham Furnace from 1792 to 1794; subsequent owners were Philip Leidy, Rev. William T. Gerhard, Edward McCarty and David Algard. It did not operate after 1872.

Nathan Michener, of Buckingham, was a journeyman tailor and traveled throughout Bucks County plying his needle and wielding his goose. Another class of itinerants was that of the "tramp" printers. Allen McGinty, printer, of Doylestown, says that their number has increased during the past two years.

One printer worked his way from San Francisco. Another, Fred Colburn, of Jackson, Michigan, comes east in the same way about every three years. They were keen observers of men and events, and acquired in the course of their travels much valuable information and experience.

Every trade or craft has its patron-saint. Saints Crispin and Crispinian are the patron-saints of shoemakers, saddlers and tanners; they were Christian missionaries from Rome to Gaul in the third century, and like St. Paul they worked with their hands and made enough to support themselves and also aid the poor.

In the upper end of Bucks County there were many expert woodcutters. Farmers and boatmen were also engaged in this work, during the winter months. Some were engaged by lumbermen to go a long distance from their homes. They built a "shack" or small house in or near the woodland in which they prepared meals and had their bunks. In our days they would use their automobiles, returning to their homes each night. The trunks of large and sound oak trees suitable for sawing were the first to be felled. Railroad ties were made from trees of medium size. These ties were hewn with broadaxes. White hickory, free from knots, was selected for making spokes and other parts of carriages, wagons and carts. There was a spoke factory at Frenchtown, N. J., which provided a ready and near-by market. In order to obtain supplies of lumber, the makers of spokes and other parts of carriages and wagons often became lumbermen; one of these was John Finney, of Lambertville, N. J., who cut off the timber, nearly all hickory from a tract of about 200 acres on Haycock Mountain. Amos B. Headly and John H. Burton (the latter subsequently became a member of the House of Representatives at Harrisburg), cut off a tract of seven acres near our house; it was nearly all chestnut of which the fence-posts and rails were hauled to the canal by James Sheridan of Tinicum, and shipment was made in boats. Michael McEntee, of Bridgeton Township, was a prominent lumberman, after his death his son, John O. McEntee, continued the business. Tops of trees and other offal timber that was not suitable for other commercial purposes was cut into cordwood in four foot lengths and piled for measurement. (A cord of wood is four feet high, eight feet long and four feet wide, containing 128 cubic feet.) In

recent years lumbermen set up portable sawmills in the woods, and much of the work formerly done by hand with axes has been eliminated.

At the beginning of the 20th Century only a few itinerant workers were employed by farmers. Nearly every farmer had the equipment necessary for the planting, sowing and gathering of his crops. After the invention and perfection of the thresher and cleaner a few enterprising men went from farm to farm to thresh and clean wheat, rye and oats. In this section of Bucks County the men who began this business were James Slack and Raymond Haines of Buckingham. They used steam engines for power. Subsequently Mood Brothers, Titus W. Carver and William Rogers went on the road with their threshers, with balers attached to all outfits.

The dearth of men skilled in handicraft today is due to the decline of the apprentice system, whereby a youth was legally bound by indenture to serve a master craftsman for a stated number of years. As it was a compact between them the law governing contracts afforded equal protection to the rights and privileges of the employer and the employee. This system has been supplanted, in part, by manual training schools giving practical as well as technical instruction. There are two schools of this kind in Bucks County, namely, St. Francis' Industrial School, Eddington, and the National Farm School, Doylestown Township. The first named was opened for the reception of boys July 19, 1888. This institution is under the direction of and instruction is given by the Brothers of the Christian Schools and maintains, educates and imparts manual training to 255 Catholic orphan boys. It receives no State aid. The National Farm School, as its name implies, gives instruction in agriculture in all its branches and otherwise provides for the education of its students equal to a high school course. It was founded in 1896 by Rabbi Joseph Kroskopf and the number of students at the present time is 185. The institution is given financial aid through appropriations made by the Legislature of the State, and is exempt from taxation.

During the Middle Ages it required centuries to build a cathedral that commands admiration today; but a modern "skyscraper" (tall building) can now be erected within a few months. While it took my father a day to make a pair of shoes, a machine

today turns out many hundreds of them in a day. In this age of speed in transportation on land, sea and in the air; when by simply turning a dial we may hear voices in either Rome, Paris or San Francisco, we may think that our forefathers were slow; but who shall say that they did not reach the goal.



THE PACK PEDDLER

Child Life During the American Revolution

By SARAH R. FACKENTHAL (MRS. B. F. JR.) RIEGELSVILLE, PA.

(This paper was read, some years ago, by Mrs. Fackenthal, before the George Taylor Chapter, Daughters of the American Revolution, Easton, Pa. It was also read before this society by her husband, Dr. Fackenthal, at the Doylestown meeting, May 3, 1930, in order that it might be preserved by having it printed in our published proceedings. Mrs. Fackenthal passed away May 16, 1925.)

THE lives of children during the American Revolution varied as much as at the present day. There were those whose fathers were men of influence, education and wealth, and the children benefited by all that that implied. Others, whose parents were unsuccessful pioneers, suffered with them in their many privations.

We see in museums many articles of dress of the finest texture worn by babies of that period, but it is from the portrait of children that we see the folly and extravagance of dress. It was not until after the Revolution that a distinctive dress for boys and girls was adopted. Until then, as soon as boys put on trousers (about the age of five) they dressed exactly like their fathers, except in miniature. In returning a picture of children, which for a long time hung in the Boston Museum of Art, General Loring wrote: "I shall miss the little grown-ups. Were there no children in those days?"

A little girl of eleven writes the following description of her attire to a little friend:

"I wore my yellow coat, black bib and apron, black feathers on my head, my paste comb, all my paste garnets, jet pins, together with my silver plume, my locket and rings, black collar and mitts, 2 or 3 yards of blue ribbon, striped tucker and ruffles, and my silk shoes. My hair was dressed over a high roll, so heavy and hot, that it made my head itch and ache and burn like anything."

Children wore stays made of heavy strips of boards and steel, made over buckram and canvas. In a museum one pair was labeled as having been worn by a boy of five. There is certainly a suggestion in some of these little fellows' portraits of whalebone and buckram. The boys wore silks and satins, trimmed with lace; also wigs. In an expense account, we find the entry: "Shaving my three sons' heads at sundry times £5

14 shillings, James' wig £9, Samuel's wig £9." These sons were aged 7, 9 and 11 years.

On the other extreme, it is told of a certain grandmother who rode on horseback eighty miles to a New Hampshire clearing, to see her son's first child, who was but a few months old, that she shed bitter tears on finding him clad in a gray woolen homespun slip, with an apron of blue and white checked linen.

In educational advantages no greater contrast of conditions could exist, than between the schools of early Revolutionary days and our present school system. In the country districts, the children were often obliged to walk several miles to the nearest schoolhouse, where, in some localities, school was held two months in winter by a man, and two months in summer by a woman, with mostly boys attending in winter, and mostly girls in summer. Here were taught reading, writing, spelling, and enough arithmetic to enable them to keep the family accounts, and to make change in a shop. Nor was this making of change a simple matter. In every state there were at least two units of value,—the state pound and the Spanish milled dollar, which had been adopted by Congress in the early years of the Revolution. The Spanish milled dollar then in general circulation, was divided into half, quarter, eighth and sixteenth parts, each represented by a silver coin, and each containing more or less of shillings and pence, according to the section of country in which it was current. Thus, in New England and Virginia six shillings were accounted a dollar; in New Jersey, Pennsylvania, Delaware, and Maryland seven shillings and six pence made a dollar; while in South Carolina and Georgia only four shillings and eight pence constituted a dollar. The school boy, therefore, was expected to convert the local pounds and shillings of his state into dollars and joes, and to know the rules for turning York money into Pennsylvania money; and to know the value contained in a coin in various sections of the country.

With the district school, the education of a majority of the lads in the country ended. A few more fortunate passed thence to a seminary, kept by a minister, or to one of the famous academies, which were regarded as feeders to Yale or Harvard.

Little Paul at Blimbers, or Smike at Doothboys Hall, did not have a much harder fate. The principal mode of schoolmasters imparting knowledge was by the rod. Indeed, the

teacher who in our day should subject pupils to the rigid discipline, the hard fare, the long sermons and prayers, and the floggings, which then fell to the lot of the schoolboy, might count himself fortunate to escape without being prosecuted by the Society for the Prevention of Cruelty to Children.

To sit eight hours of the day on the hardest of benches, poring over Cheevers Accidens (the Latin grammar) and other text books, to commit to memory pages of words in Webster's American Institute, to read long chapters in the Bible, to learn by heart Dr. Watts' hymns, to be drilled in the Assembly Catechisms, to go to bed at sunset, to get up at sunrise, with morning and evening prayers, to live on brown bread and pork, porridge and beans, made up the life of the lads of most of the academies. The food then partaken of, with thankfulness, would now be looked upon as prison fare.

When Sunday came around, they found it anything but a day of rest. There were long prayers in the morning by the master; there were commentaries on some scriptural text to be got by note before meeting, to which they all marched off with pencil and paper to take down the heads of the sermon, and then to give what account of it they could at evening prayers.

From the academy the lad passed to Harvard or Yale. Were it not for the old buildings which still exist, it would be impossible to recognize in the Universities of our time any trace of the humble colleges which then existed. The Class of 1768 of Harvard voted to take their degrees dressed in homespun. The four years' residence at college was spent in an acquisition of Latin and Greek, the study of mathematics, logic, theoretics and metaphysics. Not until about 1783, when Noah Webster published his famous spelling book and dictionary, was there any decided uniformity of spelling.

Rude as was the school system of New England, it was incomparably better than could be found in any other section of the country.

In the Southern states education was almost wholly neglected. It was only the children of wealthy planters, who had private tutors at home, or were sent to England to school, or to one of the few American schools, who were given the advantage of an education.

Much less attention was paid to the education of the daughters,

and it was not until Revolutionary times that boarding-schools for girls sprang into existence.

President John Adams wrote to his daughter on March 17, 1777: "I have seen a remarkable institution for the education of young ladies at Bethlehem. About one hundred and twenty of them live together under the same roof; they all sleep together, in the same garret; I saw one hundred and twenty beds, in two long rows, in the same room. The bed and bedclothes were of excellent quality and extremely neat. How should you like to live in such a nunnery?"¹

Thomas Jefferson shows a loving interest in the education of his two little motherless daughters. He writes to his dear Patsy, who was at school in Philadelphia, from his home in Monticello, in 1783, as follows:

"With respect to the distribution of your time, the following is what I should approve: From eight to ten, practice music; from ten to one, draw one day and dance another; from one to two, draw on the day you dance, and write a letter next day. From three to four, read French; from four to five, exercise yourself in music; from five until bedtime, read English, write, etc. Inform me what books you read, what tunes you play, and send me a copy of your drawing. Write me by every post. Write also one letter every week to either your Aunt Eppes, Aunt Skipwick, or your Aunt Carr. Put the letter you so write under cover to me."

By the sweat of their brows they certainly earned their bread in those days. There was plenty of work even for little children. They sowed various seeds in the early spring, and weeded the flax in the field. Girls of six could spin. All the work on the flax was done by women and children. It was said that there were twenty different occupations in the manufacture of flax, of which half could be done by children. They could spin on the great wheel when they were so small they had to stand on a stool to reach up. It was ordered by the magistrates that children while tending sheep and cattle in the fields, should be given some other employment, in addition to that work, such as knitting, weaving tape, etc. Small looms were given the girls, on which, while watching the cattle, they wove yards of braids

¹ John Adams to his daughter, March 17, 1777. Griswold's *Republican Court*, page 8.

and tapes for use as gloves, ties, shoe-strings, hair laces, stay laces, hat bands, belts, etc., and the boys wove garters and suspenders.

Knitting was taught little girls as soon as they could hold the needles, and in some records we find girls of four who could knit stockings and mittens.

Every little maiden had her sampler, which served the double purpose of teaching the letters and the numerals, while learning the stitch, followed by crude representations of impossible birds, beasts, flowers, trees, buildings, and human beings.

Many farmers' sons and daughters earned their first spending money by making birch brooms for the country store, from whence they were shipped to Boston and other towns. They did not grow rich on broom-making, as the uniform price paid was but six cents, and it took three evenings to make one broom.

Major Robert Randolph told in fashionable circles in London, that he carried many a load of birch brooms on his back ten miles to market, that he might thus earn a few shillings.

The crop of wild cherries was one of the most lucrative of boys' resources. They were used for making cherry rum or cherry bounce, and would bring a dollar a bushel.

During the Revolution, the mail which went out from New York to Philadelphia five times a week, was carried by boys on horseback. John Quincy Adams, when but nine years old, became post-rider for his mother, between Braintree and Boston, a distance of eleven miles, to bring intelligence from his father during those anxious days after the battle of Bunker Hill. Nor was this a light or easy task, with the unsettled roads and the unsettled times.

The spirit of patriotism filled the minds of the children as well as the parents, in those days. Josiah Quincy states that at Andover there was a schoolboy law that every hoop, sled, etc., must in some way bear 13 marks. If the marks were wanting, the article was confiscated.

Dr. Abbot writes that he never heard any swearing in Andover until after the Revolution.

The practice of seating the congregation in those days, when boys occupied pews by themselves, was not conducive to their best behavior. In Dorchester, by 1776, the boys had become so turbulent, the spirit of independence so rife and riotous, that

six men were appointed to keep them in order, while usually two tithing-men could perform this duty.

The term religion during those Revolutionary days, would hardly be recognized in our modern religious training of children. The spirit of the Lord—perhaps, I should say the fear of the Lord—filled their days. They certainly had a profound familiarity with the Bible. J. L. Buckingham stated in his memoirs, that he read the Bible through at least a dozen times before he was sixteen years old. Prior to the Revolution there were few American children who had ever read any book, other than the Bible.

Born into a religious atmosphere, reared in religious ways, surrounded by religious influences, they could not escape the impress of deep religious feeling. I am sure that this inheritance has come down in a measure to every one of us, and a spirit of thankfulness should be ours for such an heritage.



Memorial Services for Henry Chapman Mercer, Sc. D., LL.D.

BORN JUNE 24, 1856

DIED MARCH 9, 1930

(Doylestown Meeting, May 3, 1930)



THE fiftieth anniversary meeting of the Bucks County Historical Society was held in the auditorium of the museum at Doylestown, Pennsylvania, on Saturday, May 3, 1930. The morning session was devoted to the presentation and reading of annual reports of the Assistant Curator, Librarian, Treasurer and Secretary, the election of directors, the election of new members and other routine business. The latter part of the afternoon was given over to the reading of historical papers.

During the noon recess the directors met for organization, at which meeting Dr. B. F. Fackenthal, Jr., was elected president to succeed the late Dr. Henry C. Mercer, and Col. Henry D. Paxson was elected first vice-president. At a later meeting J. Herman Barnsley was elected second vice-president.

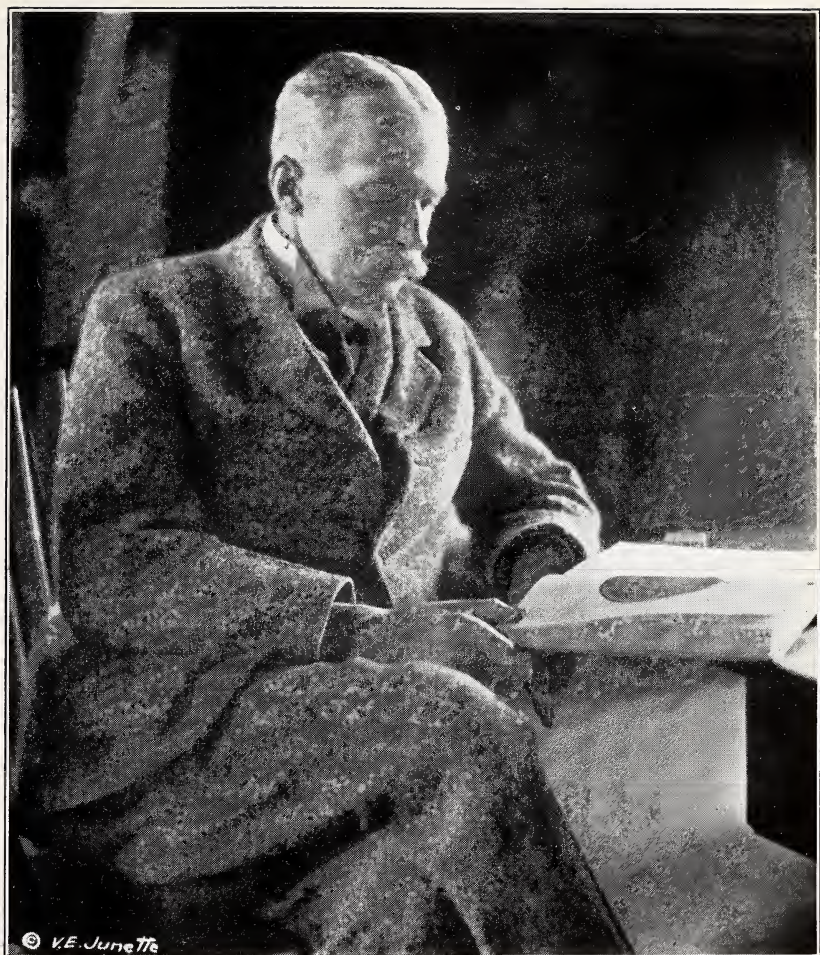
DR. HENRY CHAPMAN MERCER MEMORIAL MEETING

As set forth in the notice of meeting, sent to all members, as well as to other friends of the late Dr. Mercer, the first part of the afternoon session was a memorial meeting to bear testimony to the worth and achievements of our friend, the late Dr. Mercer.

The meeting was called to order by Dr. Fackenthal, who said:

It becomes my sad duty to announce the passing of Dr. Mercer, which occurred at "Fonthill," on the afternoon of Sunday, March 9, 1930, who for twenty years was the honored president of this society. His body was laid at rest on Friday, March 14th, in the Presbyterian Church Cemetery alongside those of his parents and other members of his family.

As set forth in the call for this meeting, it is now in order to resolve ourselves into a memorial session, to pay honor and tribute to the memory of Dr. Mercer. Not only members of this society, but his other friends as well, are cordially invited to take part in these exercises and add their tributes to his memory.



Henry O. Mercer

I will therefore open the proceedings by presenting my own contribution to the worth and character of this great scientist.

REMARKS OF DR. B. F. FACKENTHAL, JR.

A meeting without Dr. Mercer! A museum without the guiding hand of its master! His inspiring personality is sorely missed from among us today.

I cannot recall when I first met him. It was probably after his graduation at Harvard University in 1879, or while he was a law student at Philadelphia, where he was admitted to the bar of that city in 1882, but whenever it was, I was greatly attracted by his personality, and am glad to say that I retained his friendship and confidence down to the day of his death.

He often came to the upper end of the county, where I live, and together we explored the Durham Cave; the Jasper Quarries and Indian remains on Rattle Snake Hill; the Durham Furnace and its iron ore mines; the Palisades of Nockamixon; the Ringing Rocks of Bridgeton and the potteries nearby. These excursions were always a liberal education, and I soon learned to appreciate him and the thorough and painstaking manner in which he carried on his researches. He was a great lover of nature and withal a splendid botanist. He was specially interested in the Durham Cave, and in 1893 made a more systematic exploration of it, camping in a tent on Reservoir Hill, near Durham Furnace, and spending about a month, with a force of workmen in digging down through the waste material, deposited on the bed of the cavern, as well as through the debris on the floor, of the so-called Queen Esther's Drawing Room; he was richly rewarded, finding many bones and other evidences of native and extinct animals. The following year, in 1894, he was made Curator of the Museum of American and Prehistoric Archaeology at the University of Pennsylvania, and published one of a series of books for the University, entitled "Researches upon the Antiquity of Man," wherein he recorded the result of his Durham Cave explorations, including a full and complete list of all remains discovered. The volume contains seven other of his anthropological papers.

During 1895, the University placed him at the head of the Corwith Expedition to study the Hill Caves of Yucatan, which resulted in the publication of a splendid volume, profusely

illustrated, giving the result of the expedition and his search for evidences of prehistoric man. He retired from the University of Pennsylvania in 1897 in order, as he told me, to have more time at his disposal for field work.

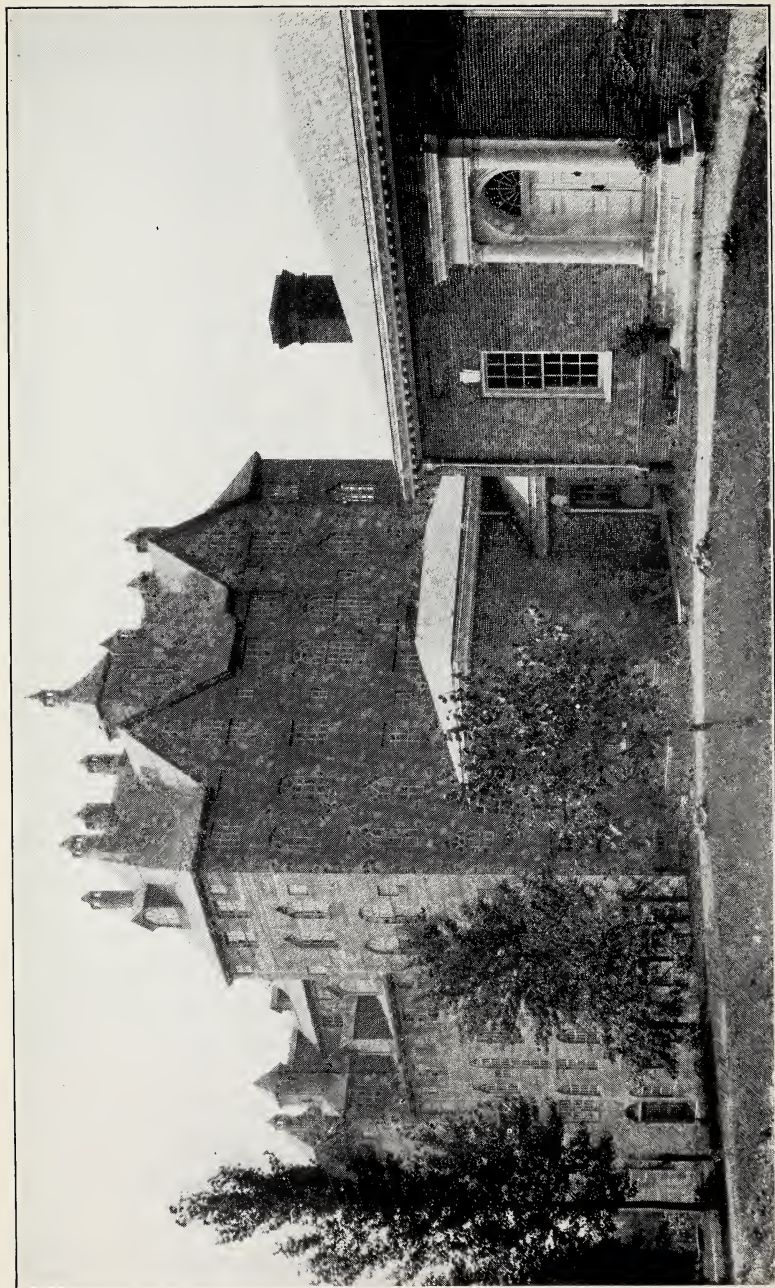
I have in my library a unique volume, substantially bound, containing fifty-five of the papers which he contributed to science, mostly on archaeology and anthropology, the first one bears date 1892. I shall, at a later date, present this book to the Bucks County Historical Society.

Dr. Mercer was indeed a great student along many lines, and I have often wondered if his friends and the public generally, really appreciated his ability or fully understood him and the great purpose of his life. A man of strong and distinct personality, I wonder if there really was any one quite like him. I recently took a friend, a great author, to call upon him, who on leaving expressed great admiration of him, and complained because Dr. Mercer had done so much, while he had done so little.

Dr. Mercer stood foremost among the archaeologists of this country, with many battles royal to his credit. As early as 1885, when but 29 years of age, he wrestled with the giants of his profession, as to whether a gorget or so-called Lenape Stone, found in a field in Buckingham Township, was genuine. He won his battle, and clearly showed it to be a genuine Indian production.¹ He published the history of that controversy, which, as far as I know, was his first published book. Again, for a time, he stood alone in his conclusions as to the genuineness of the Turtle Backs, or imperfect arrow and spear heads, found in the glacialdrift gravels at Trenton, N. J. These he fully proved were of argillite and came from the refuse of an Indian quarry on Gaddes Run, near Point Pleasant, washed down the valley of the Delaware during some early flood, and did not belong to man antedating the Columbus Indian; in fact, he always maintained that there were no evidences of man prior to the great northern ice glacier.

Dr. Mercer was present at the organization of this society fifty years ago (January 20, 1880), and was the last of the old guard to leave us. It was not, however, until 1908 that he was elected a director and made first vice-president, but owing to the illness of General Davis he was, at that time, the acting president,

¹ The Lenape Stone is now in possession of Col. Henry D. Paxson.



MERCER MUSEUM, DEDICATED 1916

View on the right shows part of First Museum, built in 1904. Later called Elkins Building.

succeeding to the presidency in 1911, after the passing of President Davis. This was the beginning of his greater interest in the society, to which thereafter he devoted much of his time and thought, building the "Mercer Museum," dedicated in 1916, to which he transferred from his "Indian House" at Aldie, his antiquarian collection, and for the endowment of which he has so generously provided.

He contributed forty-seven most interesting and instructive papers to our proceedings; the first on July 22, 1884, and the last on January 17, 1925. Of the last only a synopsis was read at the Doylestown meeting, but the completed paper was published in 1929 as a separate volume of 328 pages and 248 illustrations, entitled "Ancient Carpenter Tools." He presented the entire edition to this society.

One of the crowning features of Dr. Mercer's researches, was doubtless the publication in 1914, of his "Bible in Iron, or The Pictured Stoves and Stoveplates of the Pennsylvania Germans," profusely illustrated, recording the results of his many years collecting and studying the Colonial firebacks and stoveplates of the Pennsylvania Germans. I was much pleased and highly honored to have him dedicate that book to me. I think his interest in stoveplate inscriptions, his study of the Medieval Art of Illuminative Writing among the Pennsylvania Germans and his study of the potteries of Nockamixon, Haycock and Rockhill townships, were among the incentives that led him to the manufacture of tiles, in which he became a world authority. He took out three patents to cover and protect some of his new processes, viz.: "New Methods for Making Tiles or Other Decorative Devices"; "A New Process for Making Mosaic Tiles"; and "A Process for Printing Pictures or Other Designs on Fabrics and Paper."²

I remember his great pleasure when I sent him from Nuremberg, a number of photographs of German tiled stoves, and again when I brought him a tile from the Alhambra in Spain. In like manner he was pleased when I brought him from Egypt, two distaff-like spinning reels, purchased from shepherds who were spinning uncarded wool with them, while tending their flocks along the banks of the Nile.

² These patents bear dates July 14, 1903; June 21, 1904, and March 7, 1905.

Dr. Mercer's life work, his literary accomplishments, his contributions to history, and his labors in the fields of archaeology and ethnology. We all know of the two great museums—the Mercer Museum with its collection of objects illustrating the history of human industries, and the "Fonthill" home with its decorative tiles and art—unique among the museums of the world.

We all recall with pleasure the innumerable meetings of our Society when the outstanding feature seemed to be the presence of Dr. Mercer. We will long remember his radiant and kindly face and his tall form quivering with enthusiasm and emotion as he told us of some new discovery.

I recall one memorable meeting. It was on a June day in 1916—the dedication of the Mercer Museum. You, Dr. Fackenthal, presided. The building was thronged with distinguished people who had come to felicitate and congratulate Dr. Mercer on his accomplishment. Of the addresses delivered that day I recall the masterly effort of Dr. Learned, of the University of Pennsylvania. I would like to repeat, if my memory will serve me, the concluding words of Dr. Learned's beautiful tribute:

"The town of Doylestown is itself like 'a city set on a hill, that cannot be hid,' so this Museum is to raise its beacon light even above the spires of Doylestown to cast its beams beyond the bounds of the ancient colonies, over the seas to the homelands whence the early colonists went forth 200 years ago. All honor to the master builder, Dr. Mercer!"

The Scriptures tell us, "We brought nothing into this world, and it is certain we can carry nothing out." Dr. Mercer brought nothing into this world, but he has left to his native town, his native county and to the world the fruit of his life work. Posterity will forever honor his name.

Dr. Mercer has left us—the loss to our Society and his friends is immeasurable. Those who knew him and loved him, will always cherish the memory of his genius, of his learning, of his culture and of his delightful personality.

REMARKS OF MR. HENRY G. BRENGLE

I have a very few words to say, being here as a representative of Dr. Mercer to give thanks, as one of his executors, for a

medal that was awarded to him during the last days of his life.

I first met Dr. Mercer in the year 1887. I had never seen him before. He graduated from Harvard a good while before I did, and I came to Doylestown, one evening to attend a dinner party. There were only a few men present, and the conversation after awhile became very pessimistic until finally he looked up and said, "I want to repeat a little poem I heard today." It is very old and I suppose you are all familiar with it; he said:

"If with each rose we see a thorn there grows,
Strive that no thorn shall be without its rose."

That had quite an effect on the diners, and the party thereafter livened up. Now he is gone; the rose has perished, but we still have the result of his work, and with that in mind, I have brought this medal, which was sent to me as a representative of his estate, by the Arts and Crafts Guild, Incorporated, of Philadelphia. I would like to put it here for exhibition so that everybody present can inspect it. With the medal the

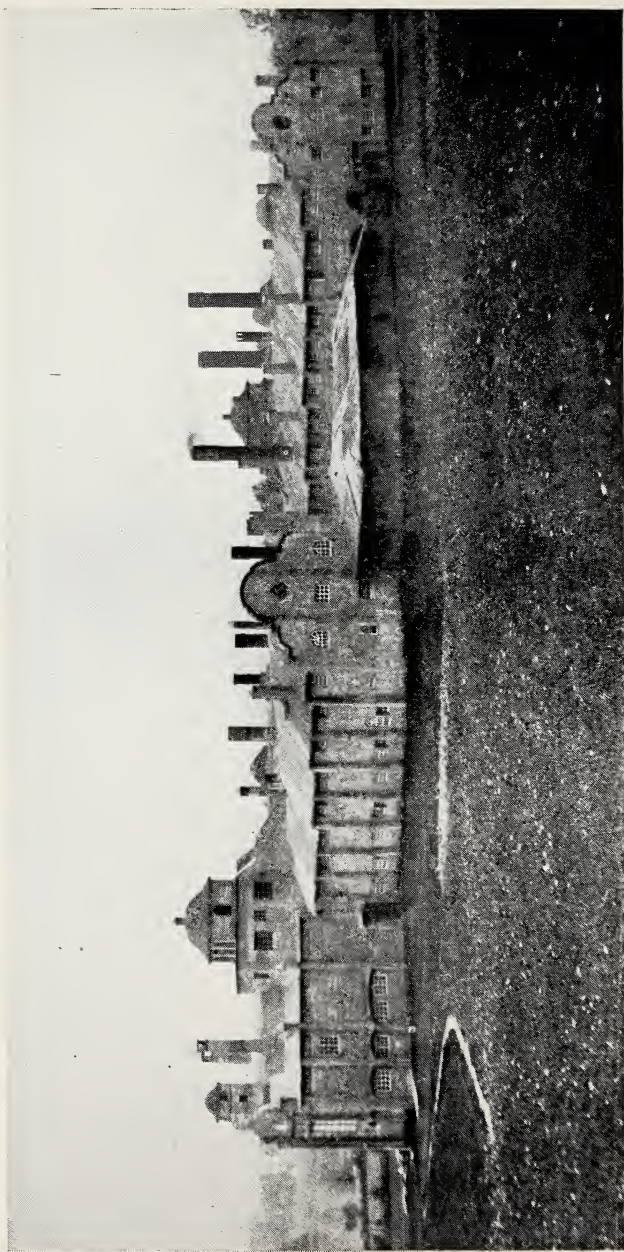


Arts and Craft Guild has also sent the following testimonial, adopted at a meeting of the Guild members April 11, 1930, which they desire to have read, as follows:

"All through the past year the Jury has given careful thought to this award. It was decided by unanimous vote that there was no one better fitted to receive this first award than Dr. Henry C. Mercer, of Doylestown, Pennsylvania, who at that time was still living. After his death a special meeting was called and it was finally agreed upon by the Jury and later ratified by the Board, that the award should hold. Dr. Mercer, during his lifetime, rendered untold service both to his community and art, and was always a true and loyal friend of the Guild. He was best known, perhaps, especially in the art world, as the creator of lovely colored tiles, but he was besides an anthropologist, archaeologist, and one of the main factors of the Bucks County Historical Society, one of the most unique and fascinating museums in the country. Apart from this he was recognized as a collector, patron, advisor, inspirer, a vital factor in the art life of Philadelphia and its surroundings."

DR. OWEN WISTER (Communication): Were I not to be absent at the time of your Mercer Memorial meeting, I should be more than glad to attend it and say something. This that follows will interest you and the society very much:

About Christmas time (1929) I saw a very distinguished archaeologist, David McKeever, a Scotchman, but well known everywhere. One night the question of whether a certain museum piece was genuine or not came up for discussion. McKeever said to Francis Newbold, who had decided that the piece was genuine, but desired confirmation, "Why don't you ask Henry C. Mercer, of Doylestown? He is not only a competent scholar but quite the greatest potter living at the present time, and I think probably the greatest potter in the last thousand years; I might say in the last two thousand years." Two or three days later I saw McKeever again and told him that I had been very much struck with what he had said and should like to tell it to Mercer. He said, "By all means; that is what I think of Mercer. He is an extraordinary figure, a figure straight from the renaissance."



MORAVIAN POTTERY AND TILE WORKS

Dr. Mercer began making tiles at his "Indian House" at "Aldie," in 1898. On October 8, 1912, he transferred his operations to his newly-constructed plant at "Fonthill," of which the above is a view looking north.

About February 13th or 14th (1930) I paid Mercer a visit and took a friend to see him. He had been upstairs. He was allowed to be downstairs, but I saw that he was very ill. I am happy to think that I got this chance to tell him what McKeever had said. Of course he disclaimed it, but I saw that it had given him very deep pleasure.

MRS. FINLEY BRADEN: Mr. Chairman and fellow members and friends: After the passing of kind Dr. Mercer, I wrote and published an article in verse which I thought you might like to hear this afternoon, because it expresses the value and glory of life work well done.

HE LABORED LONG AND WELL

DR. HENRY CHAPMAN MERCER

1856-1930

BY MRS. FINLEY BRADEN

A many-sided scientist for aye,
 Has passed beyond the narrow bounds of earth,
 With much accomplished through life's lengthened day,
 To long remain, and tell the world his worth.
 Historian, writer, thinker to the end,
 In earlier years, explorer, traveler, too;
 An archaeologist with plans to blend
 And group what would from time to time accrue.

A complex mind was his to grasp and hold
 The things that make for strong material life;
 An anthropologist, who would unfold
 The past, but dimly limned with lore so rife.
 He had the hermit heart which delves apart,
 And finds the treasures that must e'er await;
 Discouragement and failures at the start,
 But ending in achievements truly great.

An educator long the lines that tell,
 And leave their impress on both heart and mind;
 Withal a dreamer! Heard the magic bell,
 Which to the unattained will ever bind.
 The arts and crafts he followed too with pride.
 Producing many things that will endure;
 To finally excel, he bravely tried,
 His life a pattern for both rich and poor.

There at "Fonthill," the home he built with skill,
 And loved to occupy through coming age,
 He labored on with slow—decreasing will,
 And ably filled his life book's daily page.
 A man of peace, content to live remote,
 And sagely let the present world go by,
 Filmed in books, papers, magazines of note,
 A strange new world, which he could but decry.

And many kindly deeds have come to light,
 Things wisely done in unobtrusive ways,
 To aid, inspire, uplift, before Death's night,
 So rounded out the measure of his days.
 The wondrous realm of Nature his delight,
 Its common stores, to him, were something more;
 The trees and flowers and the sunshine bright,
 The birds in sanctuary, at his door.

A benefactor to his native town,
 His county, state and country, gaining aught
 That issued from his brain to bring renown,
 And was with weariness, so often fraught.
 He had far vision of the Golden Time,
 A brighter, better world in which to live;
 The drive for wealth exchanged for work sublime,
 Which happiness and solace too, can give.

And surely God's rich blessing rested on
 His unpaid labors to enrich mankind.
 From those who valued him, he now is gone,
 Yet leaves a widely honored name behind.
 The massive structure he upreared with care,
 And grandly filled with everwise intent,
 Containing much considered odd and rare
 Is for all time, his lasting monument.

DR. EDWARD HART: I didn't expect to do more than add my presence here today, and hear the tributes to Dr. Mercer, with whom I had but a slight acquaintance. I had met him but once, but I knew, of course, of his family, and when I was a very small boy, I went with my grandfather, John Watson, to visit Mrs. Henry Chapman, who I suppose was the second wife of Judge Chapman, and therefore not one of Dr. Mercer's ancestors, as he was a grandson of Judge Chapman's first wife, but I knew, although not from personal observation or contact, something about Judge Henry Chapman, for whom Dr. Mercer was named.

I remember him as a man appearing of great sternness to my youthful ideas. The occasion of my meeting Dr. Mercer was in the museum here at Doylestown, but his fame came to me from many sides, and it is a great pleasure to be here and testify by my presence and contribute what little I have to say in his honor. He certainly was a great man, and he was all the greater because he was wholly an original man. I haven't been as great a traveler as my friend Fackenthal, but I have visited a great many places and know of no museum anywheres, except perhaps at Nuremburg, that can compare with this one. In my limited experience it is absolutely unique, and reflects great thought and care on the part of Dr. Mercer.

MR. RUDOLF P. HOMMEL:⁶ I thank you for allowing me to offer my contribution in memory of Dr. Mercer.

I had the privilege of meeting Dr. Mercer for the first time in the year 1915. After previous correspondence about stove plates and their inscriptions I, one day, went to "Fonthill" to call on him and his greeting was: "Are you Mr. Hommel? I thought you would be a much older man!" In spite of the difference in age, we soon became fast friends and my natural bent for historical things was fostered by the wonderful enthusiasm of Dr. Mercer, and this is a point I wish to emphasize:

He was an inspiration to anyone who had the privilege of meeting him. His kindly criticism was always constructive and inspired to closer and deeper study. His enthusiasm for research was infectious, he could rouse the dormant abilities for investigation in anyone who had the least spark of it, and kindle it to a blaze. In short: Association with Dr. Mercer was a liberal education.

Dr. Mercer's most important contribution to Science, however, in my mind, is the founding of a new branch of it, namely: The Systematic Study of Primitive Trades, Domestic Utensils and Activities. He has broken with the old prejudice that only the life endeavors and belongings of the so-called "upper" classes are worthy of investigation. In a democratic spirit he has called to the fore the so-far-slighted class of simple people and

⁶ Mr. Hommel is the gentleman selected by Dr. Mercer to head his Chinese expedition. He has been in the Far East since 1921, and is now in America on a vacation, planning to return to China in the near future to continue his researches.

toilers, who compose about 95 per cent. of humanity, and have been the backbone not only of ours, but of any civilization. To stress this important point Dr. Mercer has built this museum, to show how toil, trades and crafts, domestic manners and activities have been conducted in past ages, and—this is important—has shown it for the first time. Other museums may spring up to do the same thing, and we hope they will, but let us not forget that Dr. Mercer was the originator of this new branch of Science and, if for no other of his many accomplishments, will go down in history as one of America's great men.

MR. SAMUEL C. EASTBURN: Mr. Chairman, recounting a very recent letter I had from Dr. Mercer, showing even in his weakened physical condition his active interest in everything along the lines we have heard, it so happens that I am by the grace of the Governor of Pennsylvania, a member of the Washington Crossing Park Commission, and in laying out the general lines of work for the park, we were contemplating putting walks and driveways through the park to accommodate the present automobile traffic for the next twenty-five years, and the question was up for discussion, and is still undecided, as to whether we should have accommodation for the automobiles to drive up on a concrete platform to enable them to view the historic places without getting out of their cars. I had intimated to Dr. Mercer on a previous visit that we were troubled about that, and didn't know just exactly what to do, but a short while ago (I didn't think of it or I would have brought his letter, I think it would have been much better than I can tell it)—I got a four-page letter from the Doctor. I shall not attempt to recite it, but I remember one sentence particularly which said: "Good Heavens, Eastburn, don't let them put concrete walks and driveways through Bowman's Hills; you will scare away the fairies."

MISS BELLE VAN SANT: A short time before Dr. Mercer's death, I went with some friends to visit "Fonthill," we were soon ushered into the presence of Dr. Mercer. He was very attentive and showed us some tiles that came from Damascus, whereon were inscriptions taken from the Koran. He said he "doubted if there was any real art that had not a religious background." He then went on to say, "What sort of a gothic cathedral could

Voltaire have designed?" In speaking of the tiles he remarked that while his man was obtaining them the city of Damascus was being shelled by the French, thus destroying much more valuable art than had the destruction of the library at Louvaine, which had caused such French lamentation.

JOHN S. WURTS, ESQ.: I am glad to have this opportunity of adding my personal tribute to the memory of Dr. Mercer. He was a great man and a great friend. I know not how to find words to express what his friendship meant to me, but we who are assembled here today knew him, and to know him was to love him.

MRS. ANNIE MERIDITH FRETZ: A few months ago Dr. Henry C. Mercer received some visitors in his usual gentlemanly and cordial manner. They were the descendants of three brothers, Simon, Thomas and Dr. Hugh Meredith, who were the sons of James Meredith, born in Wales, and settled in Bucks County on land south of Doylestown along the Neshaminy. Dr. Meredith was the son of Simon, who emigrated to America in 1708, and died before the Revolution. His will is on file in the Bucks County Courthouse, and by a codicil thereto, he bequeaths "land on which a schoolhouse should be built in which the children of the neighborhood could be educated." This showed him to be a liberal minded and progressive citizen.

Dr. Mercer's great-grandmother, the wife of Abraham Chapman, was a daughter of Dr. Hugh Meredith, and it does not take much reflection to see that the lives of five generations, each one getting "wiser and better," have produced a wonderful life as exemplified in that great man, Dr. Henry C. Mercer.

MRS. HENRY J. SHOEMAKER: Dr. Henry C. Mercer was a wonderful man. To me he was a great teacher and a very great inspiration. I never talked with him that I did not learn something of value, and on leaving him always felt a deeper interest in the worthwhile things of life.

It was his profound love of nature that first led the Nature Club of Doylestown into the establishment of a bird sanctuary and wild flower preserve, and then with his desire to establish

something more permanent, he became our guiding spirit in the development and growth of an arboretum at "Fonthill."

Dr. Mercer was interested in the history of the past and its preservation, but he was also always building for the future. The work which he began will go on, and he needs no encomiums from us, or monuments erected to his memory, they cannot add to the glory of his career, for the work of his lifetime is his perpetual memorial. We shall always hold fresh in our memories his indefatigable efforts and his never-tiring labor in behalf of the interests of the Bucks County Historical Society.

RESOLUTIONS READ BY MRS. I. M. JAMES

As a representative of the Doylestown Nature Club, I desire to present a copy of the following resolutions adopted by a committee appointed March 10, 1930:

RESOLUTIONS OF THE DOYLESTOWN NATURE CLUB, ON THE DEATH OF HENRY CHAPMAN MERCER, Sc. D., LL. D.

At a meeting of the Doylestown Nature Club, held at Doylestown, on March 24, 1930, the following resolutions were adopted:

WHEREAS, in the death of Dr. Henry Chapman Mercer, the Doylestown Nature Club sustained the loss of a wise and generous friend.

Be it Resolved, that the members record in grateful appreciation the following courtesies extended by him in fostering the growth of the Club:

A Bird Sanctuary, established in 1912. Under the supervision of Dr. Mercer, the Club planted one thousand White Pine seedlings, and many trees of larger growth on the northwestern part of the estate. The "Little Stone House" was renovated for use of the Club; and a room situated over the garage, named "Pavilion Terrace," was equipped as a meeting place for the Club. The monument at the south entrance to Fonthill, marking a row of Elms, planted in memory of the Club's deceased members, was designed by Dr. Mercer. The Arboretum, started at Fonthill in 1928, was a cherished dream of Dr. Mercer's, promising fulfillment when the Nature Club planted, under his invaluable guidance, ninety-one trees native to Pennsylvania, which have been marked with Mercer Tile Labels.

RESOLVED, that the Doylestown Nature Club carry out the wishes of the late Dr. Mercer, by continuing the Arboretum and by caring for the grounds at Fonthill according to his last will and testament.

RESOLVED, that these resolutions be recorded in the minute-book of the Doylestown Nature Club, and that a copy be sent to Dr. Mercer's family.

RESOLVED, that copies be engrossed and framed, one to be placed in the Bucks County Historical Society Building, the other to be hung at Fonthill.

HELEN B. PORTER, President,
ELIZABETH DOUGLASS ATKINSON,
LAURA V. ANDERSON,
SOPHIA P. EASTBURN,
ANN G. SHOEMAKER,

Committee

MR. MATTHIAS HALL: We all hear what a great man Dr. Mercer was, but no one has referred to his ancestry. He was the son of William Robert and Mary (Chapman) Mercer. His maternal grandfather, for whom he was named, was Judge Henry Chapman, whose ancestry can be traced back into Durham, England, for many generations.

His emigrant ancestors, John and Jane (Sadler) Chapman, arrived in America in 1684, with several small children, and settled in Wrightstown in the County of Bucks.

Judge Chapman was an influential Democrat, elected to the State Senate of Pennsylvania in 1843; appointed judge of the Chester-Delaware Judicial district in 1847 to fill out an unexpired term, and elected Judge of Bucks and Montgomery Counties to serve for ten years from 1861 to 1871.

Abraham Chapman, Esq., the great-grandfather of Dr. Mercer, was also a leading lawyer of his time, as well as a prominent and leading man of Bucks County.

I am firmly of the opinion that Dr. Mercer's distinguished ancestry aided in making him the great man that he was.

MR. JOSEPH E. SANFORD: In the year 1856 a child was born whose coming was of small importance to the world of that day. In 1930 this child, now grown old, died and his death was a matter of world occasion. In 1856 he belonged to a family, today he belongs to all who have felt the stimulus of his imagination. No word that we can utter will either add or detract from his stature—he is. He has moulded his personality in imperishable tile; he has visioned it in concrete and steel, and these with his great collections will be a quickening spirit, so that those coming after us may understand and love him as we who were proud to call him friend.

MR. FRANK K. SWAIN (Communication): I was associated with Dr. Mercer for more than thirty-four years, having entered his employ in 1896. He was then forty years of age, while I was a mere stripling. He was born at Doylestown in 1856, in the same house, belonging to Judge Henry Chapman, where his mother was born.

When a young man he spent some time in Europe with his maternal aunt, Mrs. Timothy Biglow Lawrence, returning in 1870 after the close of the Franco-German war. On their return Mrs. Lawrence began the building of "Aldie," locating it on the site of an old farm house. "Aldie" (demolished in 1928) was the home of Dr. Mercer for many years until he moved to "Font-hill," in 1912.

In 1895 he built a work-shop at "Aldie," which he named "Indian House," where later he housed his archaeological collection. After I entered his employ in 1896 he added some finishing touches to the building. At that time he had no thought of making tiles.

On May 22, 1893, prior to my employment, he discovered the Ancient Argillite Indian Quarries on Gaddis Run, near Point Pleasant. He described these quarries in a communication published in the *Bucks County Intelligencer*, July 6, 1893. During the time he was curator of the museum of the University of Pennsylvania from 1894 to 1897, he continued to live at "Aldie." In 1895 the University of Pennsylvania placed him at the head of the Corwith expedition to Yucatan. He began building Indian House before he resigned from the University. During the autumn of 1896 he made his notable explorations of Big Bone Cave in Tennessee. In the autumn of 1897 he spent some days at the Herstine potteries in Nockamixon Township, Bucks County, where he personally made a number of dishes and bowls, but was much disappointed when they were spoiled in burning; this was, however, his apprenticeship as a potter. He lamented the fact that these old potteries were fast going into ruin, as the grandsons and other descendants of the old potters had lost both the art and interest in the process. Not one of these potteries now remains in operation. We found the plants cluttered with unburned ware, some of which had stood on the drying racks for many years. The potters-tools lay on abandoned work benches buried in dust; the tubs and buckets containing

pigments were dried out, the hoops falling off and their contents spilled on the floors.

In the spring of 1896 we went to Nockamixon Township, nearly opposite Holland, N. J., railroad station, to dig for Indian pottery in a field near the Delaware River, part of the farm of Owen Stover. We made our headquarters at Hollihan's hotel in Upper Blacks Eddy, where we were most comfortably entertained by the manager, old Mrs. Cochran.

The years 1897 and 1898 were spent mostly in gathering the nucleus of his great collection of tools and other antiquarian objects. In August, 1898, we went to Maine, and while there he made sketches of Aztec and other Mexican carvings, which I afterwards learned were designs for tiles, but those patterns were never used. His first tiles were copied from designs on old stoveplates. He got his idea of making tiles while visiting the old potteries of upper Bucks County, where he went primarily to gather tools, etc., for his collection. His first plan was to make pots, dishes, etc., but his artist friends discouraged that feature, saying they wanted tiles and not crocks. We started making tiles at Indian House in an experimental way in 1898. He described his experience in making tiles in an article published in the *Doylestown Republican* September 4, 1899, and more fully described in a paper read by him before the Bucks County Historical Society, February 10, 1914 (Vol. IV, page 482).

In 1911 he purchased additional property, adjoining his "Fonthill" estate, on which to build his new and much enlarged plant; this was begun in 1911 and moved into in 1912. You are all familiar with the history of "Fonthill" and of his tile-making, which need not be entered into by me. I am pleased to say that I was associated with him as his manager down to the day of his death.

Dr. Mercer was specially skilled in making freehand sketches. He was a most wonderful man, a great student of art whose master-mind is lost not only to us who knew him and loved him, but to the world at large as well.

I trust I may be pardoned for saying something about our personal relations, which were naturally of the closest. His confidence and appreciation of my services is shown by the fact that he presented his tile plant with its entire contents to me, together with a large tract of land, and in other respects by his

last will and testament, has shown his appreciation of my life-long connection with him. I have, indeed, lost a kind benefactor and a great friend.

MR. ALVIN F. HARLOW: A short biographical notice of Dr. Mercer prepared by Mr. Harlow was read, but having been copy-righted cannot be printed.

MR. HENRY CHAPMAN MERCER RECEIVES THE HONORARY
DEGREE OF DOCTOR OF SCIENCE AT FRANKLIN AND
MARSHALL COLLEGE

Remarks of Dr. B. F. Fackenthal, Jr., President of the Board of Trustees of Franklin and Marshall College, in presenting Mr. Henry Chapman Mercer for the degree of Doctor of Science on June 8, 1916:

Henry Chapman Mercer, graduate of Harvard University, archaeologist, anthropologist, former Curator of American and Prehistoric Archaeology in the University of Pennsylvania, exploring and writing a History of the Cave Hills of Yucatan, and for his many other cave explorations and archaeological researches, for developing the process of making and decorating tiles and pottery of the Pennsylvania Germans, and for collecting, classifying and publishing a history of the early Pennsylvania German fire-backs and stove-plates, called "The Bible in Iron," for collecting and preserving in a museum at Doylestown the "Tools of the Nation Maker," which illustrates the work and progress of pioneers in the settlement and development of our country, and for his many other scientific and educational attainments, I ask, President Apple, that the honorary degree of Doctor of Science be conferred upon him.

* * *

Remarks of President Henry H. Apple, in conferring the honorary degree of Doctor of Science upon Henry Chapman Mercer, June 8, 1916:

By virtue of the authority conferred upon me by the Board of Trustees of Franklin and Marshall College, I grant to Henry Chapman Mercer the honorary degree of Doctor of Science, with all the rights and privileges appertaining thereto, and in evidence

thereof I present you with this diploma duly signed and sealed with the seal of the college.

DR. MERCER RECEIVES THE HONORARY DEGREE OF
DOCTOR OF LAWS AT LEHIGH UNIVERSITY

Remarks of Professor P. M. Palmer, Director of the College of Arts and Sciences of Lehigh University, in presenting Dr. Henry C. Mercer for the honorary degree of Doctor of Laws on June 11, 1929:

A native Pennsylvanian, Mr. Mercer was graduated from Harvard in 1879 to enter upon a career which has been distinguished by its versatility, by its devotion to scholarly ideals, its richness in adventure and its interest in humanity.

His interests in archaeology and anthropology directed toward a comparison of ancient man on the various continents have led him far afield in the Americas and in Europe and have been extended in recent years to China, where even now his agents are gathering material for a work on Chinese implements. He built and endowed the museum at Doylestown, Pa., which contains his collection of colonial tools and utensils, and has published several books on anthropological subjects.

Mr. Mercer has invented, among other things, new methods of tile making, a new process of making mosaics and a process of printing large designs on fabrics and paper. He has received various medals and prizes in recognition of his work. To the world at large he is perhaps best known by his Moravian Tile Works, the result of his efforts to reproduce and develop artistically the old German processes of tile making.

He is a fellow of the American Association for the Advancement of Science, a member of many other learned bodies, president of the Bucks County Historical Society, formerly Curator of Prehistoric Archaeology at the University of Pennsylvania, etc.

Mr. President, I do not propose to enlarge upon Mr. Mercer's accomplishments, for Mr. Mercer is a modest man, but I cannot refrain from adding a personal note. I have known his work for nearly twenty years and in my eyes his greatest accomplishment is his success in recovering for the twentieth century the mediaeval conception of art in which the artist and the crafts-

man were one. It is the artist in Henry C. Mercer to whom I pay my personal tribute.

* * *

Remarks of President Charles R. Richards in conferring the honorary degree of Doctor of Laws upon Henry Chapman Mercer, June 11, 1929:

Henry Chapman Mercer, distinguished archaeologist and promotor of historical research, inventor of processes for the manufacture of art tiling, member of various learned societies, contributor to human knowledge.

By virtue of the authority vested in me by the Board of Trustees of Lehigh University and upon the recommendation of the faculty and by formal vote of the Board of Trustees, I confer upon you the honorary degree of Doctor of Laws with all of the rights and privileges pertaining thereto. In witness whereof, I present you with this diploma and direct that you be invested with the insignia appropriate to the degree.

PAPERS AND ADDRESSES PRESENTED TO THE BUCKS COUNTY
HISTORICAL SOCIETY BY DR. HENRY C. MERCER

The Doanes Before the Revolution.

The Doanes and Their Times.

The Grave of Tamanend.

Notes Taken at Random.

The Red-man's Bucks County.

Folk Lore—Notes Taken at Random.

Tools of the Nation Maker—First Paper.

Tools of the Nation Maker—Second Paper.

Brief History Talks.

Cave Explorations.

The Lenape Stone.

Aims and Purposes of the Bucks County Historical Society.

Memorial Tribute to Gen. W. W. H. Davis.

Pottery of the Pennsylvania Germans.

Acceptance of the Log House Presented to the Bucks County
Historical Society.

The Grave of Tammany.

Open Fire Cooking in Bucks County.

The Common Tinder-box of Colonial Days.

John Chapman—First Settler of Wrightstown.
 Notes on the Moravian Pottery of Doylestown.
 Historical Remarks at the Bedminster Township Meeting.
 Two Stoveplates Described.
 Colonial Seals of Bucks County.
 Remarks on the Christmas Tree.
 Presidential Address—Old Bakeovens Described.
 The Bowie and Other Knives.
 Presentation of the Mercer Museum, June 17, 1916.
 President's Report at Annual Meeting, January, 1917.
 Flax Seed Mills.
 Survival of Ancient Hand Corn Mills in the United States.
 An Investigation of the "Giant's Grave" at Bowman's Hill.
 Turnpike Roads in Bucks County.
 Notes on the Norse Mill.
 Notes on Basket Making.
 Notes on Forgotten Trades.
 An Ancient Indian Pipe from Bucks County.
 Wafer Irons.
 Ancient Methods of Threshing in Bucks County.
 A Lost Stoveplate Inscription.
 Remarks on Adobe Bricks.
 The Zithers of the Pennsylvania Germans.
 An Attempt to Find the Site of the Indian Town of Play-
 wicky.
 The Dating of Old Houses.
 The Origin of Log Houses in the United States.
 Recollections of Tennent School.
 Random Notes on Forgotten Trades.
 The Colonial Carpenter—Ancient Carpenter Tools.

HENRY CHAPMAN MERCER—HARVARD 1879

Born June 24, 1856—Died March 9, 1930

By his Classmate, Mr. J. T. Coolidge

Printed by permission of the Harvard Graduate Magazine

Graduating from Harvard in '79, Mercer was admitted to the Philadelphia Bar in 1881; but his inclinations tended rather to other fields. His activities in these included service for three years as Curator of the American and Prehistoric Sections of the

University of Pennsylvania, while acting as editor of the department of Anthropology of the "American Naturalist." In the course of this work he explored many caves in the Delaware, Ohio and Tennessee Valleys as well as caverns in Yucatan, and his finds included the remains of extinct animals before unknown to this Continent: Tapir, Mylodon, Peccary and Fossil Sloth.

The author of some twenty volumes, Mercer's publications included: "The Lenape Stone or the Indian and the Mammoth," which attracted wide attention; "Researches on the Antiquity of Man"; a number of articles on Archaeology and Anthropology in various scientific publications; the Proceedings of several Scientific Societies; "The Bible in Iron," dealing with old stoves and stove plates of the Pennsylvania Germans, and his recent publication, "Ancient Carpenters' Tools," which may well be considered his most important.

He was a member of fourteen Scientific and Academic Bodies, and his other honors included a bronze medal from the Spanish Government, a grand prize at the St. Louis World's Fair, the gold craftsmanship medal of the American Institute of Architects, and the medal of the Boston Society of Arts and Crafts. Franklin and Marshall College conferred upon him the degree of Sc. D. in 1917, and Lehigh University the one of LL. D. in 1929.

Not long after graduating from college, Mercer noted some red clay upon his father's place in Doylestown, Pennsylvania. Baked in the embers of the fire it revealed promising qualities, and a small homemade kiln was built. From this humble beginning sprang the widely known Moravian Pottery which developed into a cluster of eight kilns where tiles of peculiar character and beauty were produced—a business which soon grew to large proportions as its products spread far and wide.

Mercer drew an endless variety of designs—from natural history, religious subjects, history and other sources. He modeled the forms for the moulds, developed by experiments the color glazing. To use his own words: "My research aiming to restore and develop forgotten ceramic processes has resulted in a patented process for making glazed and colored tiles for mural decoration." This process was also applied to mosaic tiles where large and elaborate designs were transferred to slabs of clay, and each portion of the composition cut out, colored

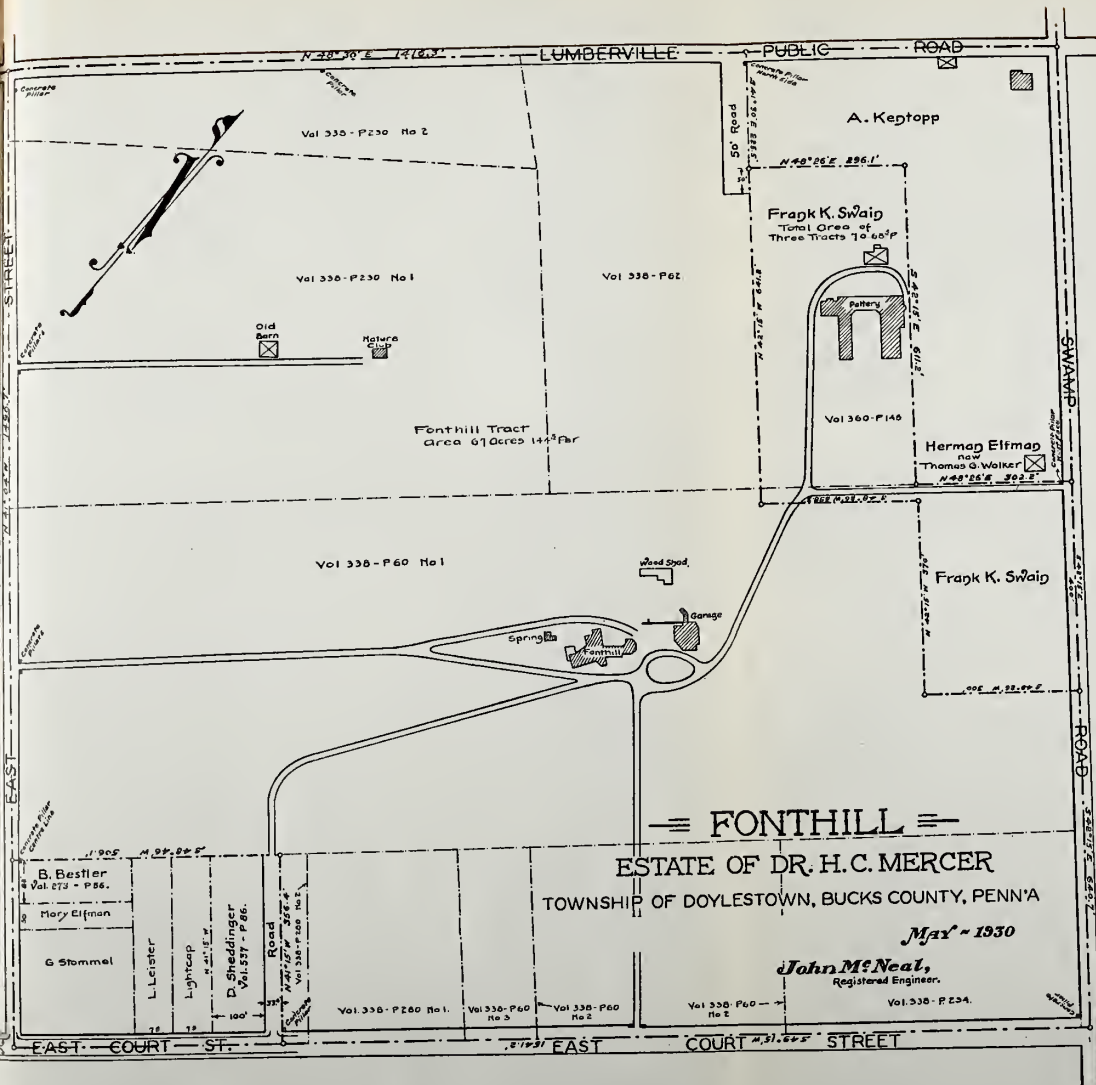
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separately and fired, somewhat in the manner of a stained glass window. He followed closely the workman who stamped out each tile by hand, and lastly the degree of firing required. Special designs for special places and purposes had to be studied, and these Mercer hit off happily. Notable examples of the Moravian Pottery tiles are installed in the Capitol at Harrisburg, in Mercer's own house, the Gardner Museum and Museum of Fine Arts, Boston. In the latter are two galleries where Spanish and Italian floor tiles were called for, with a proportion of color design. The difficulty of saving a color glaze from wearing off under foot Mercer overcame by adopting the method he had found in two ancient tiles, of sinking the colored design.

As tools and implements of ancient man were important witnesses in fixing anthropological periods and race characteristics, it was natural that Mercer should be led to make a close study of them, and so, not confining himself to those of the Old World and the Far East, he began to gather specimens from his own neighborhood in Bucks County, Pennsylvania, brought over by the Moravian Germans in the 18th century—specimens at first dug out of ash heaps or in ransacking old cellars and garrets (one finely decorated stoveplate was found on top of a chimney) and later by gift and purchase. Some of these implements differed slightly if at all from similar types used in Egypt, in ancient Rome or in the middle ages, and included besides objects of domestic use, the general run of tools and agricultural implements. Kindred products of other states were drawn upon as well, until the collection exceeded the storage capacity of Mercer's "Indian House," and in 1916 he built a lofty and spacious structure of concrete throughout which he gave to the Bucks County Historical Society of Doylestown, and later endowed.

In this museum tiers of galleries rise above a vast central court and establish a series of cubicles some sixty in number, each one filled with the tools of a craft and specimens of its wares—from the basket maker to the blacksmith, from the cobbler to the weaver, while the central space below embraces the larger agricultural implements as well as a whaleboat, a Conestoga wagon, a plough and a large grist mill. The whole comprises some 20,000 objects. This collection Mercer aptly christened the "Tools of the Nation Maker," and defined it as

"an Ethnological collection representing the tools and utensils of the American pioneer." The contents of an important portion of this museum are recorded in a recent publication of Mercer's "Ancient Carpenters' Tools," illustrated and described with a vividness equally absorbing to the technical and lay reader. This collection stands as a monument to its maker, to become of increasing value to succeeding generations.

No stilted terms would fit a description of the large concrete home called "Fonthill," which Mercer constructed for himself in the environs of Doylestown. Standing high upon a hillside it suggests an old castle of varied mass—vastly picturesque and reflecting withal the entire freedom from convention of its talented and imaginative Architect and Master of the Works. The thick walled interior contains deep window reveals which throw rays of light upon tiles set in floor and pier and wall. Tiles of varied shape and color extend to the ornament of frieze and capital and barrel vaulting, and include a variety of designs in a wealth of color—from the simple conventional to the historical scenes quaintly depicted in assembled tiles, the whole relieved by a somber setting of rough concrete. A clear picture of this interior would be difficult to portray because floor levels and heights of studding vary, and staircases lead to further changes of floor levels through winding passages to the rooms above; but if symmetry is occasionally sacrificed to constructional needs, the dominant impression remains one of beauty and quaintness—of something belonging to a realm far away from our day.

His classmates will recall Mercer as a man of unusual character and imagination. Handsome, winning, interesting—and odd. Philosophy he found could not serve him because it did not solve the larger problems of life which he sought; nor could he fully accept the reality of a beneficent order of things in a Nature which allowed a systematic slaughter in animal life—and animals he loved: his dogs were friends to him and he treated them with tenderness: "Sailor" could wipe his feet upon the mat and unlatch the door, and was proud of it, and so was his master. His estate included a bird sanctuary and it is easy to understand that he wrote against cruelty to animals and vivisection. Eager to solve problems which appealed to him, Mercer was fascinated by discussion—and even disputation, a tendency which, he related, received a check from an old native of York, Maine, who observed: "Harry, it is better to live pleasant than to be right."

Mercer loved Nature and everything which possessed quality in Art, especially in its simple and quaint forms which he dwelt upon lovingly and developed in his designs; but he held unbending hostility to ugliness and false taste and especially to the noisy vulgarity of a certain side of American life. Quantity production by machinery was not for him, and in his own work he followed the spirit of the craftsman of the past. So he lived a life quite apart in the quiet of the country, deeply engrossed in the pursuits which were to bring him success and distinction.

For many years Mercer was handicapped by illness and broken down nerves; but his absorbing interests conquered all physical ills so far as to carry him to the end of a life of useful and notable achievement.

J. T. C., '79

THE BUILDING OF "FONTHILL," AT DOYLESTOWN, PENNSYLVANIA, IN 1908, 1909 AND 1910

Copy of a typewritten description found among the papers of the late
Dr. Henry Chapman Mercer

Several sketches and memoranda in my note books show that the building of "Fonthill" was first considered definitely during my visit to New England in the summer of 1907, and that the cheerful fronting of certain houses, overlooking Commercial Street, Boston, running N. N. E. by 1 point East, were studied for this purpose.

The house was planned at "Aldie," Doylestown, Pa., by me in the winter of 1907, room by room, entirely from the interior, the exterior not being considered until all the rooms had been imagined and sketched after which blocks of clay representing the rooms were piled on a table, set together and modeled into a general outline. After a good many changes in the profile of tower, roofs, etc., a plaster-of-Paris model was made to scale, and used till the building was completed.

From eight to ten unskilled day laborers at the then wages of \$1.75 a day, supervised by Patrick Trainor and under my constant direction, built the house in three summers, those of 1908, 1909 and 1910. I employed no architect to carry out my plans and there were no skilled laborers employed in the construction proper, though afterwards a carpenter put in the doors

and window sash, a mason set the tiles on the vertical walls and a painter put in the window glass. As a single exception to this Jacob Frank, employed at the Moravian Pottery, set the ceiling tiles which were cast into the building during its construction. Cement mixers were not then in general use and all the cement was mixed by hand in the proportions of Portland Cement 1 part, yellow sand (called Jersey gravel), $2\frac{1}{2}$ parts, and bluish crushed trap from the crushed stone works at Rockhill Station, south of Quakertown, Bucks County, Pa., 5 parts. The mixed material was lifted either in iron wheelbarrows, or boxes, with four handles, to be carried by two men by a pulley fastened at the vertex of a very simple apparatus, namely, a triangle about ten feet high, made of three heavy wooden strips balanced with guy ropes so as to swing outward from the brink of any of the walls or at a hand pull backward inside the edge. This inward swing brought the uplifted load within the triangle to the workmen's hands. A single horse belonging to Patrick Trainor, named Lucy, trained to pull forward the pulley rope, on a counter block and back on the path, did all the work of lifting during the three years. No accidents happened to the men whose names are set in tile letters on one of the inner roofs of the east gable. Thunderstorms frequently occurred, but only one so damaged the ceiling of the Library gallery that the crust had to be replaced. The men were trusted to count the ingredients and mix the cement properly. They only failed once on leaving a mixed batch to stand over night and then unwillingly removing the rotted mixture after pouring it into the forms.

During construction the building was roughly roofed with felt paper. The re-enforcing irons used everywhere according to approved formulae were hollow $\frac{3}{4}$ -inch and less iron pipes bought in junk yards in Philadelphia and Doylestown, except for the beams, where solid iron rods, not twisted, were used in the usual way after bending around posts, to the proper angles, six per beam. Besides this, heavy galvanized farm fencing, in large rectangular mesh, was laid over all the re-enforcements.

The plan of the whole house was an interweaving of my own fancies blending with memories of my travels and suggestions from several engravings, in particular the "Dutch Housekeeper" by Gerard Dow, the "Great Barn" by Wouwermans, in the Dresden Gallery and a Lithograph now in my Morning Room

called "Le Main Chaud" by De Boucourt, also a woodcut illustrating a story called "Haunted" in a book published about 1865 by Tinsley's Magazine, named "A Stable for Nightmares." This picture gave me the night lighting of the Morning Room. The first interior imagined and clearly seen was that of the west side of the Saloon seen when standing near the large window about eight feet from the door to the Library. The arrangement of rooms at different levels seen over the gallery in the Saloon is a memory of a Turkish house seen by me from a rear garden in Salonica in 1886. The Saloon still clearly retains the appearance of these preliminary dreams, but the original fancies for nearly all of the other rooms were changed as we proceeded sometimes perhaps for the better and sometimes for the worse.

The name Fonthill well remembered as that of a house in Essex County, Virginia, belonging to my distant relative, Mr. R. M. T. Hunter, seemed very appropriate on account of the fine spring rising here on a hilltop close to the northwest corner of the tower. I long hesitated with it on account of its earlier celebrity in the historic "Fonthill" of Beckford in Wiltshire, England, long since destroyed, but finally decided to use it on the advice of an English friend of high authority.

THE WALLS—The foundations, not over 5 feet deep, rested on a solid ledge of sandstone, but as this sub-stratum was generally covered with a dense crust of broken stones and grit I doubted its existence until when later, fearing collapse, we tried to under-pin the tower. Then the trenches dug for this purpose proved the fact.

Several demolished buildings, followed by car loads of unplanned boards, furnished the wooden material for the forms. These consisted of partitions made by laying the boards horizontally, edge to edge one upon another, with battens nailed wherever convenient against their outer sides. Double lengths of wire were looped around and twisted upon the projecting ends of these battens as we proceeded to keep the forms from bulging. These forms were set vertically with a spirit level, and not by eye, as has been asserted. Where high winds deflected them or where they sagged or where mistakes were made the results were corrected after construction by chiseling away projecting corners or building up crusts as against the north corner of the east

gable. Nevertheless, the north library wall still shows a bad overhang. Pieces of tin were tacked over knot holes, large cracks and open joints. Owing to warping the board joints never fitted close and there was continual leakage of liquid cement. This produced many porous spots on the outer wall which were plastered over afterwards. The concrete was purposely not spaded inside the walls in the hope of making them more porous. Continued suggestions as to dampness, resulting in rheumatism, etc., caused us to cast large vertical holes by means of collapsible wooden boxes invented by me, stove pipes filled with dry sand, pulled upward as we proceeded, and even corn stalks wrapped in paper at intervals of a few feet throughout all the walls. The cornstalk plan was, however, a failure as the leaves flew in all directions into the forms and the wet stalks would not burn out of the holes. Angles in the very irregular chimneys, and the chimneys themselves, were cast upon wooden boxes or boards pounded, pried, or burnt out afterwards. The walls were cast two feet thick and the box holes either two feet long and one foot wide or one foot square. Piers, three feet by three and a half, bordered the windows in the tower, the inner wall of which for extra strength, enclosing the staircase, etc., was cast very thick. The vertical re-enforcing pipes were planted two feet apart in the forms and straightened as we went up. The fence wire was slid down against them and the horizontal pipes laid in on the wet cement at every two feet. The arches over many of the windows were made by bending $\frac{1}{4}$ inch by 3 inch wide wooden strips into semi-circles to coincide with a penciled line on the outer forms and the welts left by these still show in the Morning Room. The result of our precautions as to wall ventilation, namely, loose tamping, collapsible boxes, and cement batches mixed by hand and greatly varying in density, were very successful. Blackened shoes in dark closets never mildew. There has never been condensation of moisture except on the tile pavement in the hall. Cigars dry up in their boxes, Windsor chairs rattle loose.

Owing to the color of the Jersey gravel, gray cement and bluish trap, the outer walls show soft gray-yellow with faint greenish reflections and, owing to the roughness of the forms, board welts, and porous spots not retouched, the texture is very rich as seen at a distance. In experimenting upon smoothing

down these outer surfaces for weather protection with cement plaster, when a mason working upon a hanging platform did the work, we found that the plastering had been carried too far on the east upper wall of the tower and thereafter proceeded by retouching only the very porous spots.

COLUMNS—The columns intended to support roof-slopes and upper story partitions rise from the cellar to the housetop through several rooms without symmetrical arrangement. Their forms were made by boards set vertically and held together in circles with rope and wire or in squares with battens. Each was re-enforced with three vertical pipes and wire circles twisted by hand and dropped down the forms about two feet apart as the work went on. Tiled capitals and bases and cement capitals were put on after construction. Some of the latter in the wind-room were taken from very old Byzantine churches in Greece and one, the owlish face in the cellar, from Mont St. Michel in France. An octagonal wooden column used by one of my friends, an architect, in a house near Philadelphia and adapted by him from a column in the Castle of Tratzberg, in the Austrian Tyrol, suggested the polygonal columns, two or three of which are octagons, while the others have nine faces or are made circular by the use of narrow wooden strips in the form. The columns referred to by visitors, one made with stovepipes and the other with nail kegs are in the cellar of the east wing. One column was cut off during construction in the yellow room to make way for the bed. Some of the columns were plastered after construction with lime and sand mortar, others with cement. Some were left untouched and some slightly retouched.

PARTITIONS—The interior partitions connected with or supported by the columns were cast about five inches thick and re-enforced as usual. The wooden window frames and sash were made at Doylestown and Lansdale and the frames cast into the wall during construction. The cement windows were cast in channels cut with wire loops in slabs of clay and were re-enforced with thin iron rods and set in their wall-holes after construction. Those on the hall stairs are the first of their kind ever made to the writer's knowledge, but in these the stone ingredients were too large. One of them with another on the west terrace have

cracked around the irons. But those made later with chosen ingredients in the garage or with larger mullions in the Historical Building have been very successful.

CHIMNEYS AND STAIRCASES—Some of the chimneys and staircases were formed with the building, others cast upon it. The chimneys above the roof were varied in height and their caps sometimes altered for draught. Many of the flues are very tortuous. Most draw very well but a few are smoky in certain winds and defy correction, namely, those in Mr. Swain's room and the East Room. That in the yellow room radiates its heat badly, and that in the Library which smoked in west winds has been corrected. The Morning Room and Study fireplaces draw and heat well and that in the Saloon is probably one of the most efficient open fireplaces ever built. The hot air flues were made of round terra-cotta pipes cast in the walls.

CEILINGS AND ROOFS—For the flat ceilings in the cellar, platforms of boards sawed to fit were placed between the beam troughs and these levels covered with earth. Later, for upper rooms, the platforms were made very roughly of rails covered with grass under the earth layer, and then about two inches of yellow Bucks County sand was spread over the earth. The roof terraces and flatter roofs were also so treated, but on the very steep roofs of the tower and east gable carpets only were spread over the boards except on the east room ceiling, where, in spite of the steep slope, the earth and sand layer was used as described.

The vault forms were made of heaps of earth spread over piles of boxes and overlaid as before with sand, producing a series of carefully graded mounds resting on the platforms as before. This process began in the crypt of the tower where no sand layer was used. In the Library the earth mounds were raked into semi-circles or ellipses and the sand overlay carefully smoothed. All worked well notwithstanding the difficulty of scalloping the wall forms to meet the slopes of these mounds, and cleaning or washing out the column forms from down-fallen earth and sand. Having heard of serious condensation of moisture in a recently built house in Canada we decided to cast a very porous undercrust on all further ceilings. This consisted of Portland cement



FONTHILL, DOYLESTOWN, PA.—REAR VIEW, LOOKING SOUTHEAST

1 part and fine sifted cinder 6 parts. Three inches of this was spread wet over all the ceilings under the re-enforcing irons and then about five inches of regular concrete was super posed. No waterproofing compound was used for the roofs or walls except Dyckerhof's imported waterproof cement for the large west terrace. Otherwise, on the advice of Mr. Robert W. Lesley, based on experiments then made with lime, we used ten per cent. (to the volume of dry cement) of powdered slacked lime used by plasterers and called "Limoid" to waterproof the five-inch concrete layer on all roofs and terraces. This was very successful. Only one roof, namely, that in the Smoking Room, ever leaked, and that cured itself probably by crystalization in about two years. The large water tank, resting directly on the ceiling of the Wind Room was thus waterproofed, notwithstanding warnings from one of the builders of the swimming pool at the Racquet Club in Philadelphia, then recently built and lined with tar paper. This Fonthill tank, however, sprang a slight leak several years later, but again cured itself in a year or two. The same thing happened with the tank at the pottery. No cracks have thus far appeared in any of the roofs or ceilings. The roof tiles on the tower and steeple were not necessary as the surfaces under them were already waterproofed.

DECORATIONS—In the hall and Saloon clay troughs for groins and borders and clay impressions of stoveplates were used in casting the ceilings. Otherwise tiles were pushed face downwards into the sand crust so as to project about a quarter of an inch on the backs. The tile and cement pavements were set after construction. A method of casting designs or pictures upon ceilings in colored cements was twice tried successfully in the cellar of the Saloon, but not attempted later. The ceiling tile work pictures, inscriptions, designs, etc., cast as described directly during construction tried first in the crypt and next in the Library, was very successful. The elaborate and probably overworked pictures in the Columbus and Bow Rooms, which may be called adaptations of our mosaics with patterns modeled in relief and no background were designed in August and burnt and set before frost. The tiles were laid first with much difficulty, owing to the wind, on large drawings and then turned upside down and pushed into the sand. We feared sagging of

vault forms and the falling of heavy tiles set in this manner, but no such bad results followed. When we pulled out the platform props, the platforms collapsed and tons of earth and sand fell, exposing the tiles, after which the loose sand was washed off with a hose and when dry brushed and shellaced between the tiles.

INTERIOR FINISHING—The interior walls were not furred. Sometimes they were plastered with lime and sand mortar or with cement and then shellaced with yellow shellac or tinted with a clay wash colored with dry paints. The panels in the Pine Room, Dormer Room, etc., were adapted from those at Haddon Hall, the Library panels were original and colored with water color paint sprayed with shellac. The Morning Room was panelled with old Doylestown doors of varying dates and styles between 1760 and 1850.

The painted door in the Library was made by outlining the pattern with a cautery and was copied from Froissart's Chronicle and taken from my old room at Aldie. The iron balcony railings were patterned after those seen in an old second-class hotel in Genoa, those of cement in the Saloon and outer terraces were taken from the porch of San Marco at Venice. The rhymed English mottoes on the staircases are original. Several in Latin are from old house doorways in Genoa. "Non Omnia sed bona et bene" from No. 15 (black numbers), Via del Campo, "Non domo dominus sed domino domus," Via Pontaldi, No. 6 (black numbers).

All the tiles on the wall-faces were set in the usual way and not cast in during construction. The heavy outer doors are made of oak planks from the old covered bridge at Chalfont and adapted from doors at Hornby Castle, Yorkshire. The interior doors of the same construction are backed with cross battens from doors seen by me in 1886, at Durenstein in upper Austria and elsewhere on the Danube in Austria. The door nails were made in Doylestown by a blacksmith and the hinges and hinge hooks from old Bucks County barns were found in neighboring scrap iron heaps. The hook prongs were extra forked for casting into the walls. A few late paneled doors of about 1850 were bought at a Philadelphia wreckage yard.

The staircases were all plastered with round treads over wire netting placed upon the original casting.

The Columbus Room was dedicated to my aunt, Mrs. T. B. Lawrence, nee Mary Chapman, to whom I owe my education and travels, and all the rhymed tile inscriptions on the columns and corbels are original and refer to her, in gratitude for her incessant encouragement and help in things good and worthy that I have tried to do since my early youth.

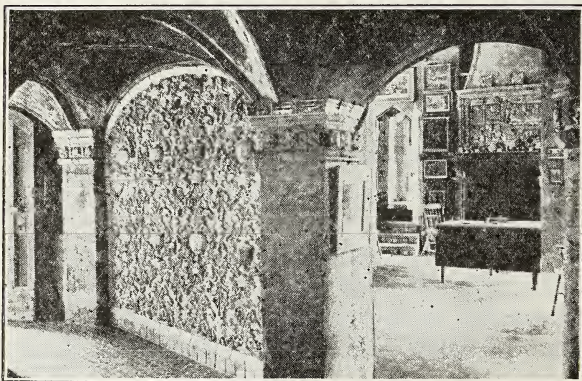
The tapestry woven curtains, etc., in the house are of modern French make and have greatly faded. Most of the prints (engravings) were obtained from George H. Rigby, the bookseller in Philadelphia. The picture frames were generally adapted from old mirror frames of about 1840, and they and the furniture painted to give color to the room. The floors were polished with damp white pine sawdust slightly oiled with boiled linseed oil.

OUTSIDE APPEARANCE—In general the house, like old barns, anthracite coal breakers, old houses in the country before 1800, and, as I believe, like many European castles, was built from the inside, that is to be used first and looked at afterwards, therefore with only a secondary regard for outside construction. The establishment of the height of walls, shape of windows, roof-lines, steeples, chimneys, etc., were finishing touches. The construction was nowhere concealed. From first to last I tried to follow the precept of the architect Pugin. "Decorate construction but never construct decoration."

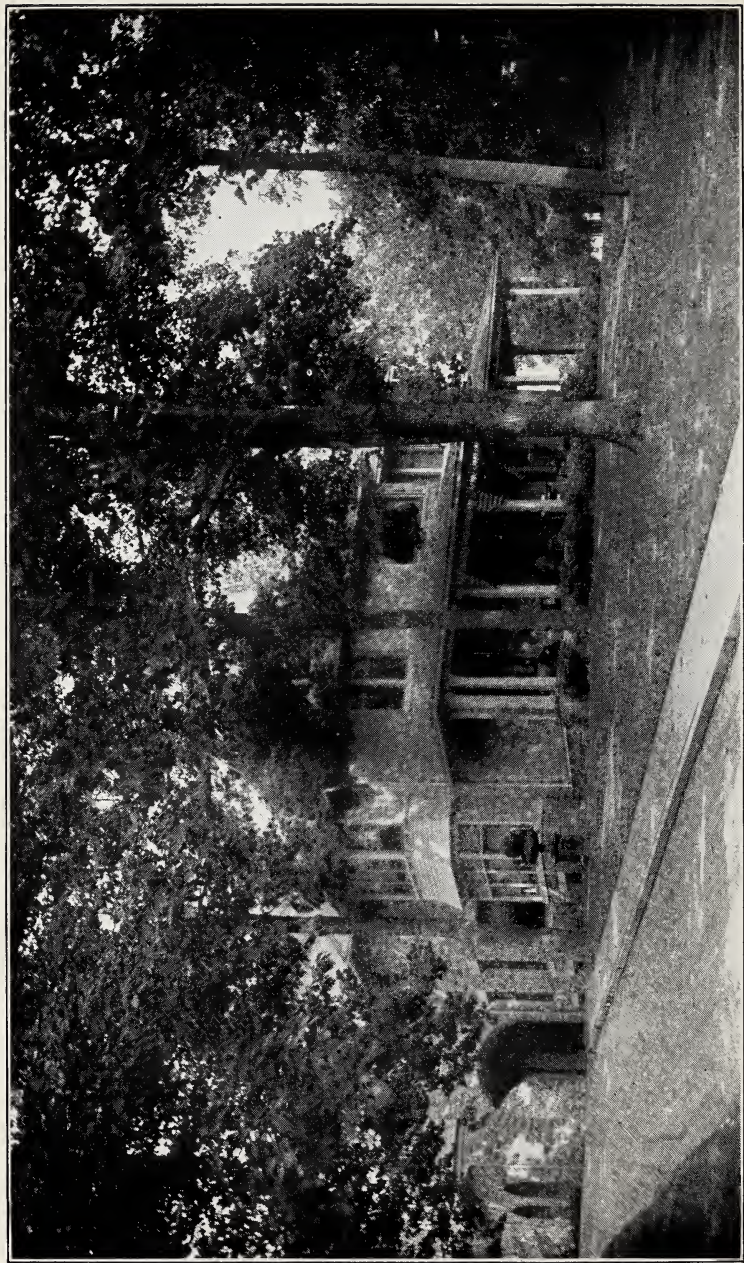
So little was outside appearance considered that we remained in doubt and some fear as to the final result till the forms were removed. The flat towered roof and "Jersey Terrace" were afterthoughts. When the covering of woodwork finally disappeared the general outlines from the east seemed disappointing and out of proportion, but seen from the west the building realized the literary and artistic dreams and memories of travel which had inspired its construction.

Large numbers of sightseers visited the house in 1909 and 1910, since then as a few visitors continue to come, leaflets were written to describe the tile work and interior decoration for their benefit. Referring to these more minute descriptions I conclude with a motto, from the door of an old house, (Vico deitro il coro della vigne, Genoa, No. 43, red.) "*Intro spice et judica.*"

(During the year 1931 there were 2,573 persons who visited "Fonthill" and registered their names and about 500 others who failed to register.)



INTERIOR VIEW OF FONTHILL



"GLACIALDRIFT," THE HOME OF DR. B. F. FACKENTHAL, JR., RIEGELSVILLE, PA.

Where the meeting of the Bucks County Historical Society was held September 13, 1930

Address of Welcome to "Glacialdrift" at Riegelsville

By DR. B. F. FACKENTHAL, JR., RIEGELSVILLE, PENNSYLVANIA

(Riegelsville Meeting, September 13, 1930)

I AM indeed glad to welcome the Bucks County Historical Society for the third time in Durham Township. The first on July 28, 1885, at our Durham Iron Works home, where the luncheon was served on the lawn, and the meeting held in Durham Cave; the second at Riegelsville on October 5, 1909, with the meeting in the Reformed Church and the luncheon served at our home, which we call "Glacialdrift." Mrs. Fackenthal, whom many of you knew, was with me then, and because of her absence, I hesitated to entertain without her, but having been honored by you with my election as president of our society, to succeed the late Dr. Henry C. Mercer, I take pleasure on assuming the duties of my office by extending to you a most cordial welcome to "Glacialdrift," so called because our home stands on a ridge of drift, the moraine which washed down the valley of the Delaware River from the great northern ice glacier, the terminus of which was but twelve miles north of here, and which spread over the entire continent from coast to coast.

The flood in the Delaware, October 10, 1903, was the highest in the recorded history of the river, which rose to a height of about forty feet above low water mark. It reached the public road in front of our house, and swept through the low lands of the entire borough. The Delaware Division canal, which passes through this borough, is the only canal remaining in the entire country that continues to be operated by boats propelled by mule power. And moreover the latest information is that that part of it between Morrisville and Bristol, a distance of $9\frac{1}{2}$ miles, is about to be abandoned.*

* Since this meeting was held and the above address spoken, the Delaware Division canal has stopped operating. It was with a feeling of sadness that I witnessed the last boat (Boat No. 181) pass through the canal on the morning of Saturday, October 17, 1931, going north empty. During the afternoon of that very day there was a meeting at the Thompson-Neely house in Solebury township, Bucks County, for the formal transfer of that part of the canal between Locks Nos. 22 and 23 at Raubsville (there were formerly two locks there but changed into one double lock) and Lock No. 5 a short distance below Yardley, a distance of about forty miles. At that meeting, which was largely attended, William Jay Turner, Esq., attorney representing

Riegelsville, although in Durham Township, is not an old settlement; the first dwelling house having been built in 1806. There was, however, a ferry with ferryhouse on the river at an earlier day. The village of Durham, two miles west of here, where the original Durham blast furnace and forges were located, was the earliest settlement in Upper Bucks County, having been started in 1727, twenty-five years before Easton was laid out and Northampton County erected. At that time the entire township belonged to the Durham Iron Company, and in addition over 2,000 acres outside of the township. In addition to their own lands aggregating over 8,500 acres, the hills for miles around in Williams and Lower Saucon townships in Northampton County and Springfield and Haycock townships in Bucks County also supplied wood for burning into charcoal used at the Durham furnace.

When the Durham Iron Company's lands were partitioned on December 24, 1773, Tract No. 33, on which this meeting is being held, was allotted *inter alia* to Joseph Galloway, but fortunately for him he sold it on June 1, 1774, to Joseph Morris, and it therefore escaped confiscation when Galloway was attainted of treason, and his other Durham lands were seized and sold. The southern part of this borough is on Tract No. 32, allotted to Hon. James Hamilton, then Lieutenant Governor of Pennsylvania. Tract No. 36, lying north of here, was allotted to James Morgan, who had been the iron master at Durham furnace. The front parts of these three tracts or subdivisions (Nos. 32, 33 and 36) all bordering on the Delaware constitute the entire borough of Riegelsville, incorporated May 24, 1916, with a population, according to the 1930 census, of 725.

Durham Township has a most interesting history. It affords a rich field for the botanist and the geologist, with its iron ore mines and early iron works, where the very first shot and shells were made in Pennsylvania for the Continental army, the first shipment having been made August 25, 1775, and they con-

the Lehigh Coal & Navigation Company, presented a deed for that part of the canal to Governor Gifford Pinchot on behalf of the Commonwealth of Pennsylvania. The Lehigh Coal & Navigation Company and the Commonwealth have entered into an agreement by which the water is to be kept in the canal during the usual summer months. This agreement provides for free use of the water for five years from July 1, 1931, and thereafter at a rental of about \$5,000 per year. The canal, abandoned for navigation purposes, and its environments are to be maintained as a public park.



HOME OF MR. AND MRS. B. F. FACKENTHAL, JR.

At Durham Iron Works, where the Bucks County Historical Society was entertained,
July 28, 1885

tinued to be made in large quantities throughout the entire time of the war. In fact, shot were also made at Durham for the French and Indian war. The Indian village of Pechoqueolin was in Durham in the southeast corner of the township, and here in Durham were the Indian Jasper quarries on Rattlesnake Hill, the Durham cave and Durham boats. Durham is the birthplace of Gen. Daniel Morgan, the hero of the battle of Cowpens, S. C., and here George Taylor lived when he signed the Declaration of Independence. The late Dr. John W. Jordan, then of the Pennsylvania Historical Society, is my authority for the statement that General and Mrs. Washington spent a night in the Mansion house at Durham, as recorded in the Moravian diaries; and there is a tradition that General Washington and his staff stopped for a midday meal at the Seven Stars Inn, in Durham Township, two miles south of here, then owned by William Abbott, later by the Overpecks.

All of these interesting features have been so frequently told, and referred to in our proceedings, that I do not propose to enlarge upon them at this time; I beg only to remind you that you are on historic ground, and to greet you and bid you welcome to "Glacialdrift," and thrice welcome to Durham Township.

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South Mountain Indian Quarries

By HENRY K. DEISHER, KUTZTOWN, PA.

(Riegelsville Meeting, September 13, 1930)

THE object of this paper is not intended as a scientific treatise on Indian quarries, but chiefly a condensed report of quarry locations and a resume of a few thoughts which are suggested in answer to inquiries that have been made of me.

In dealing with the subject of quarries we must hark far back to prehistoric times, to a period concerning which we have no written record. Whatever there is of history coming down to us through the ages, we find it to vary greatly in different parts of the world.

Europe had her Stone Age. So had Egypt and China, dating back thousands of years. The American Stone Age ended on the Pacific Coast in America, less than a century ago.

Along the Atlantic Coast, only a few hundred years ago, our forefathers built their rude cabins along the seemingly endless stretches of forest. Until then the sole human occupants of this vast expanse were the scattered tribes of Red Men to whom the cry of the catamount, the howl of the wolf, the boom of the bull frog, and the arresting notes of the katydid and cricket were but solo parts in the great Symphony of Life.

But whence came the Indian? This riddle may never be solved.

During the summer of 1929 Chief Cook, wife and daughter Pocahontas, of the Pamunkey tribe, a branch of the Powhatan Confederacy of Virginia, visited the Pennsylvania State museum. Chief Cook is a full blood and direct descendant of Powhatan. They number 120 and own 800 acres of land of which not a square inch of soil has been turned by the plow of the white man.

He said it took his wife six years to capture him. His wife was asked if he was worth so much effort.

She replied, "Oh, yes."

I showed him the poem by Bryant. He looked at it, and then with uplifted hands and eyes recited:

"They waste us; ay, like the April snow
In the warm noon we shrink away;
And fast they follow as we go toward
the setting day;
Till they fill the land, as we are driven
in the sea."

The section of our country under consideration in this article was inhabited by the Lenni Lenape tribe. When did the Red Man arrive upon our Atlantic Coast? When did the Lenni Lenape first traverse this region?

From his own legends we learn that the Lenni Lenape came from the West. If so, were these Indians equipped with stone implements upon arrival? Possibly so, if they arrived in small numbers, decimated by constant warfare enroute, which theory is in strict accordance with their tradition. Another fact which substantiates this theory is that implements made of western flint are found scattered throughout this section. Yet the answer may be No, for these few implements may have been traded for with western tribes, and considerably later, as some archaeologists believe.

Drake, in his "Indians of North America," estimates the original number of the Lenni Lenape at 500 at the time of the discovery of America in 1492. This estimate is probably too low.

According to Lenni Lenape legend and the computation of authorities, the Red Man arrived here in 1397. Dr. H. C. Mercer, in his "The Red Man in Bucks County," quotes from the journal of Rev. Charles Beatty, 1767: "Counting the beads or a wampum belt as years, according to their custom...." Again Dr. Mercer quotes from Brinton's "The Lenape and Their Legends" (p. 207): "According to the painted stick chronicle" Heckwelder, another authority, agrees with this version or Indian tradition.

This would show an occupancy of this section for a period of approximately two centuries before the arrival of John Smith in Virginia in 1607, the Dutch at Manhattan in 1609, and the Swedes on the Delaware about 1638. By that time the Indians were fairly numerous. Nearly another century had passed before the white man began to make interior settlements. During these centuries these Indians occupied at one time or other all the rivers and small streams in the valleys a few hundred miles inland.

I am citing this at length to account for the many thousands of stone implements found by collectors on village and camp sites along streams and near springs. To give this matter due consideration requires search and study of hill and dale, stream and spring, field and forest. I have been actively engaged in this work since 1873, having become interested at an early age. I gradually enlarged my field of activity until it embraced the southeastern counties of Pennsylvania. My research resulted in the accumulation of over 18,000 specimens acquired by the State Museum in 1917.

When the Indians came they needed to search for suitable material to make implements for the chase and for warfare. While engaged in fishing they discovered the waterworn pebbles in the river drift and found them suitable for hammerstones and for chipping into implements.

Naturally, the source of the stone deposit was sought, for the river drift alone could not supply the demand. I refer again to Dr. Mercer's "The Red Man in Bucks County": "Going up the Delaware stream, argillite pebbles cease about Frenchtown, N. J., and if following them as a dog follows a trail you can walk straight to the argillite Indian mine on Gaddis Run, near Point Pleasant, Bucks County, Pennsylvania."

Argillite is a metamorphosed rock formed from a clay substance and is very hard. It disintegrates considerably on the surface in most soils and varies in color from black to a bluish black and brown.

Dr. Mercer discovered these quarries May 22, 1893. He did considerable excavating and describes these quarries at length in chapter 2 in his "Antiquity of Man." He located another argillite Indian quarry on Neshaminy Creek, also in Bucks County. Many implements made of this rock are found as far west as the Susquehanna River. I have no knowledge of any deposits of argillite having ever been located along this river.

Nine flake-strewn jasper pits on Rattlesnake Hill, a mile from the Delaware River, in Bucks County, had been known for a number of years by Charles H. Laubach and J. A. Ruth, of Riegelsville. These gentlemen brought the matter to Dr. Mercer's attention in 1891. During the summers of 1891 and 1892 Dr. Mercer headed an expedition to explore the ancient jasper quarries in Bucks, Lehigh and Berks Counties, from the

Delaware to the Schuylkill River. On this expedition Dr. Mercer and Mr. Laubach discovered twenty jasper pits on the Saucon Creek, two miles west of Limeport. The information given by a farmer, who described the dump heaps as Indian mounds, led to the discovery of ten jasper pits one and one-half miles south of Limeport.

At the suggestion of A. F. Berlin, of Allentown, investigation was made by Dr. Mercer in 1892 at Vera Cruz, Lehigh County. Here were found sixty jasper pits, some of enormous size. These pits are located in virgin forest and have not been disturbed. I have brushed aside the forest leaves and found little piles of small jasper flakes, showing where the Indian sat and by primitive method put the finishing touches to the beautiful jasper blades so highly prized by the Indians and present-day collectors. Dr. Mercer has tried in vain to raise funds to preserve this spot in its primitive state for all time. I have suggested to the Pennsylvania State Historical Commission that this tract be purchased for this purpose, since it is the only remaining untouched spot of its kind, displaying centuries of aboriginal labor of immense proportions.

Probably the most extensive operations carried on in these parts are the 138 jasper pits on the hills southeast of Macungie, Lehigh County. During the summer of 1892, Dr. Mercer made excavations in several of these pits to a depth of forty feet and found evidence of heavy sticks charred at one end to harden the wood. These sticks were used for digging and prying. No solid ledge of rock of workable quality could be found near the surface, hence the tremendous excavations to find rocks or nodules. Dr. Mercer describes these operations at length in the January, 1894, issue of "American Anthropologist."

During the summer of 1904, and several times since, D. N. Kern, of Allentown, and I hunted over this tract, gathered hammerstones by armfuls and cached them in fence corners, taking with us only the best specimens. In recent years these pits have been almost obliterated by farm operations.

There is an outcrop of jasper on the Topton Orphans' Home farm, located on the watershed of the Lehigh and Schuylkill rivers. The land has been cultivated for generations and leaves no visible evidence of aboriginal operations.

Basanite, or black chert, used mostly for arrow points and

knives, is found in small nodules in beds of streams over a considerable area in Berks County. My search for a deposit of this rock of workable quality extended over a period of years, until in 1918 Lawson G. Dietrich of Richmond Township, called my attention to certain fossils which he had found in rocks on his farm. Here I was amply rewarded for my long search. This deposit is about two miles west of Kutztown, a few hundred yards north of the William Penn Highway and not far from Moselem Creek.

In Berks and Lehigh Counties material used for flaked implements predominate in the order named: quartzite, chert, jasper, white quartz, argillite and rhyolite.

Quartzite is found in many places on the South Mountains, also along the Blue Ridge or Kittatinny Mountains. The famous Blue Rocks in Berks County come under this head, and are commonly termed hard sandstone. In 1898 I discovered one of the chief sources of supply of quartzite of superior quality in Rockland Township, Berks County, a few hundred yards northeast of Sally Ann Furnace.

Dr. William H. Holmes, of Washington, D. C., contended that an abundance of quartzite could be found anywhere on the South Mountains. In order to settle this contention we visited the place on September 19, 1905, and my assertion was proved by excavations. In a very short time we had uncovered a mass of flakes and a number of hammerstones and rejects. My search has revealed no other quartzite quarries.

Implements of chalcedony are desirable but rare, probably owing to the difficulty of finding raw material in sufficient quantity in the forest. Chalcedony is found in eggshaped nodules along Sacony Creek as far north as Kutztown. Dr. Holmes urged me to search for the source of the supply. During the fall of 1918 I crossed a cornfield a short distance southwest of Lyons and here found a considerable quantity of the rock.

On the hillside near Bowers, Berks County, is Flint Hill, commonly known as "Feirshtay Barrick" among the Pennsylvania-German residents. The name has recently been changed to "Sacony Barrick." But why change an appropriate name which has been in use since the time of pioneer settlement almost two centuries ago?

The outcrop covers several acres, and the ground is thickly

strewn and mixed with flakes and rejected jasper. A small circular patch of woodland shows depressions made by Indian diggers. Many years ago I dug test holes and found a number of hammerstones. On the north side of the woodland the township supervisor dug out hundreds of loads of jasper material in sizes suitable for road improvement. Dr. Holmes and I watched the workmen unearth a pummeling stone from seven feet below the surface. It weighed fourteen pounds and was worn round from having been thrown on rocks to reduce it to portable size.

Hammerstones were abundant there years ago, but have since been carried away by collectors. Jeremiah Stern, who was reared in that locality nearly a century ago, told me that flakes could be seen lying about in scattered piles before the land was cultivated.

From this site the aborigines probably carried away more jasper than from all the other quarries combined. This may be due to the quality and quantity of the rock found close to the surface.

Can you see in your mind's eye a band of warriors, followed by a retinue of squaws heavily laden with camp baggage, slowly winding their course to the foot of the hill to one of the several springs which gush forth pure, sweet water? Can you see those squaws going about their menial tasks, while their lords are engaged in procuring the raw rock from the nearby quarry?

This land was owned by the Weiser family for many generations. William Weiser, who cleared portions of this land, pointed out to me about forty years ago the location of circular spots which he was told were the original sites of wigwams.

Between Fleetwood and Princetown is an outcrop of jasper of but minor importance. Near Fritz Island, south of Reading, is an outcrop of considerable size, but so far as I know there is little evidence of Indian labor left. Ore mining operations obliterated all traces years ago.

During the past two years it has been my privilege and pleasure to study Susquehanna River sites and collections. Rhyolite, a rock of eruptive origin, was almost exclusively used north and south of Harrisburg, as well as east and west along tributaries of the Susquehanna River. The early inhabitants of this section were the Susquehannock Indians, called Andaste by the French.

Credit is due Prof. A. Wanner, Mt. Gretna, Pa., for referring me to the location of the extensive Rhyolite Quarries.

In the fifteenth report of the Bureau of Ethnology, page 73, Dr. William H. Holmes states that Rhyolite occurs in narrow belts in the South Mountains from Harpers Ferry to a point south of Harrisburg. In his search he found no trace of aboriginal operations until reaching Maria Furnace on Toms Creek, a branch of the Monocacy, ten miles southwest of Gettysburg, on the mountain slope. The quarries spread over several acres of ground.

The flaking quality of Rhyolite found here was evidently superior to all other outcrops.

According to the number of implements of this material found all over the country drained by the Susquehanna River down to tide water, an enormous quantity of Rhyolite must have been transported from this quarry site.

Incidentally, Rhyolite Indian artifacts are found in the Jasper quarry sections of Berks and Lehigh Counties, and Jasper artifacts are found near the Rhyolite quarries of Adams County and the Susquehanna River drainage.

During the summer of 1904 I guided Professor Wanner to the Flint Hill Jasper Quarry and the first specimen he found was an arrow head made of Rhyolite.

Many persons have asked "How old are these stone implements?" It may be reasonable to answer from 300 to 500 years and much older in some sections.

Trading pelts for guns, axes, knives, etc., came with the advent of the white man, but not all Indians were supplied at once. Consequently some of the primitive tools continued in use for a period of time, gradually being abandoned on their village sites. It is probably a fair guess to state that the quarries were gradually abandoned about 1575 to 1650.

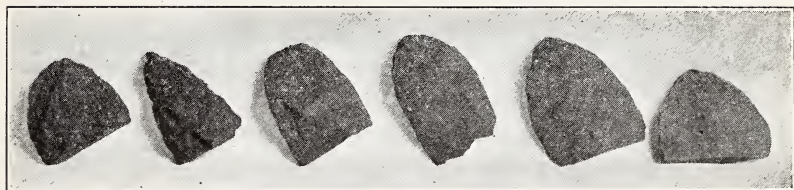
Dr. F. G. Speck of the University of Pennsylvania informed me on December 6, 1929, that last summer, in Delaware, he saw a squaw still using a stone knife to scale fish, who said that she preferred it to a steel knife.

February 5, 1930, I had the pleasure and honor of entertaining Chief Strong Heart of the Yakima tribe of Indians in Washington State. From photographs of the carved rocks on the Susquehanna River he explained many of the symbols. We

had a long discussion on the Red Man's religious faith and their devotion to the Great Spirit.

The aboriginal Red Man may well say:

Where is my home—my forest home?
The proud land of my sires?
Where stands the wigwam of my pride?
Where gleam the Council fires?
Where are my fathers' hallowed graves?
My friends so light and gay?
Gone, gone forever from my view,
Great Spirit, can it be?



Cattle Ear Marks of the Seventeenth Century

By HENRY A. JAMES, DOYLESTOWN, PA.

(Riegelsville Meeting, September 13, 1930)

A CURIOUS incident prompted your distinguished President to ask me to write something on "Cattle Ear Marks of the Seventeenth Century." While I knew that animals had been branded from time immemorial and always supposed that the cattle in Bucks County had been branded, yet I had no definite knowledge on this subject until about eight or nine years ago when a curious incident occurred.

By oversight and in the process of cleaning, the record of the ear marks of animals in Bucks County got into the rubbish and waste paper. A Jewish man was buying the waste paper and with curious, what might be called, instinct, he evidently looked at the small paper and concluded that it was of more than usual value. He held communication with some person in regard to it and was advised to see the late Dr. Mercer. Of course, in an instant, Dr. Mercer realized the value of this paper and made an effort to get it.

The Jewish man claimed that it belonged to him and fixed a price on it which Dr. Mercer would not pay. Later, the Jewish man got into some trouble and employed me as his counsel. While I was looking after his case, he produced this paper and told me that it was not to be delivered unless he was paid \$25.00. I had several talks with Dr. Mercer in regard to the matter and I told him I was keeping the paper, but I was not at liberty to give it up at that time. I have since concluded that my obligation no longer requires me to keep this paper and I believe it should repose in the Archives of the Bucks County Historical Society and I am turning it over to the Society.

Naturally, I became somewhat interested in the contents of the paper and talked to our friends, Warren S. Ely and Horace Mann, in regard to the same. Mr. Mann kindly referred me to the only writings upon this subject.

I found, upon reading a paper delivered by the late General W. W. H. Davis before the Doylestown meeting of the Historical Society on January 19, 1892, that he refers, in a short way, to

the marking of cattle in our county. He refers to Phineas Pemberton as the first to have ear marks of his cattle registered. He says that Phineas Pemberton was the first clerk of the Courts of Bucks County, and served until his death in 1702. He further says, "One of the earliest subjects to engage the attention of the first settlers of our county was the marking of their cattle. As they were turned loose in the forest, some distinctive mark to recognize them was provided by law. In Bucks the registry of ear marks was begun in 1684, but no doubt cattle were marked earlier. The first name entered in the book kept for that purpose is that of Phineas Pemberton and the entry reads: 'The marks of my cattle, P. P., the 10, 6th-mo., 1684,' and the book is part of the records of our Court. Nearly all the entries were made in that year, and the book contains the names of 105 owners of cattle in Bucks County. The usual method of marking was by cropping one or both ears; each owner's cattle must be marked differently, and any alteration of the marks was a punishable offense. Among the owners of cattle in 1684 we find the names of many prominent families of today."

I also find that the late Honorable Harman Yerkes, at a meeting of this Association held at Wolf Rocks, Buckingham, July 16, 1895, on the "Tree and Vine, the Original Seal of Bucks County," refers to the fact that the early settlers in Bucks County recorded the cuts and scarifications of the ears and the brand-marks burned in the flesh of their cattle for the purpose of identification and ownership. He says in this paper that the "Proprietary and Governor" marked his cattle by cropping off about half of both ears and for his brand mark he burned "on the near shoulder" of the animal in large capitals W. P. P. G., Governor, the same inscription as appears on his seal. He further says that, unless these marks were recorded, it did not protect the ownership or right of property. He also refers to a case of an unrecorded stray where "at the request of the ranger" she was slaughtered by James Harrison. In the division, the Governor took two-thirds and the ranger one-third, after Harrison had had 60 pounds for wintering her. He concludes by saying that this was a good bargain for the Governor and his ranger.

The "Record of Ear Marks" is a very old and quaint document. From its age and use, some of it is almost illegible. There

are other parts of it which are as clear and distinct as if written only yesterday. It is a most interesting piece of antiquity and it is fortunate that it can be preserved. On the inside of the first page, there is the following legend: "The Record of the ear marks entered between the years 1682 and 1693, Phineas Pemberton, Ct. Com." General Davis must have seen this record when he wrote his article.

The paper contains the names of many of the original settlers in Bucks County, among them are those of Phineas Pemberton, Thomas Watson, John Palmer, John Hutchinson, Samuel Hough, Thomas Janney, Thomas Dungan, Henry Cooper, Stephen Van-Sant and many others. The marks were very curious and some of them might not be tolerated at this time, owing to the fact that it might be charged as cruelty to the animal, yet I suppose that all of these animals thrived and, at that time, it was important to keep such a record so that the stock would be identified and, if lost or stolen, could be redeemed.

The following appears in the Colonial Records, Volume I, page 26: "Certain conditions or concessions agreed upon by William Penn, Proprietary and Governor of the Province of Pennsylvania, and those who are the adventurers and purchasers in the same province the Eleventh of July, one thousand six hundred and eighty-one.

"Seventeenthly—That all shall mark their hogs, sheep and other cattle, and what are not marked within three months after it is in their possession, be it young or old, it shall be forfeited to the Governor, that so people may be compelled to avoid the occasions of much strife between Planters."

These conditions evidently were strictly carried out. There is the following record as to ear marks: "At Upland Court helde at Kingesse County on Delaware River by Majestees authority June 14, 1681, Charles Jansen brings in ye Eare Marke for his cattle and hoggs and desires that ye same may be recorded. Granted and is as follow yeth viz:—the foremost syde of ye Eare halfe cutt away."

Upland Court Records, page 190.

We thus see that as far back as 1681 there was a record of ear marks. Warren S. Ely informs me that he has seen the record of several suits pertaining to brands in our early Courts

where the ownership of horses, cattle and hogs was in dispute. It seems that these brands could be assigned and the record shows that many times the owners assigned and transferred their brands to other persons.

In General Davis' History of Bucks County published in 1905 at page 44 &c., there is a reference to the branding of animals. There is also engravings of ear marks of some of the prominent families of Bucks County.

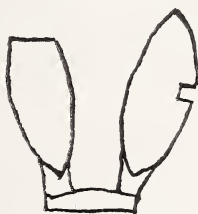
I have been told one interesting thing and that is, that Warren S. Ely was able at one time to trace the lineage of some family through the registry of the brand.

The subject of brands is a most interesting one and one could spend a large amount of time upon this subject, but as my remarks were to be confined principally to the County of Bucks, I do not know that I can say anything further on this subject.

Of course, all the older persons who had any knowledge of brands have long since been called to the Great Beyond. The present generation has very little interest in the subject and it is impossible to get any stories or matters concerning this ancient practice.



THOMAS YARDLEY



THOMAS STACKHOUSE



HENRY PAXSON

Manufacture of Hydraulic Cement in Bucks County

By DR. B. F. FACKENTHAL, JR., RIEGELSVILLE, PA.

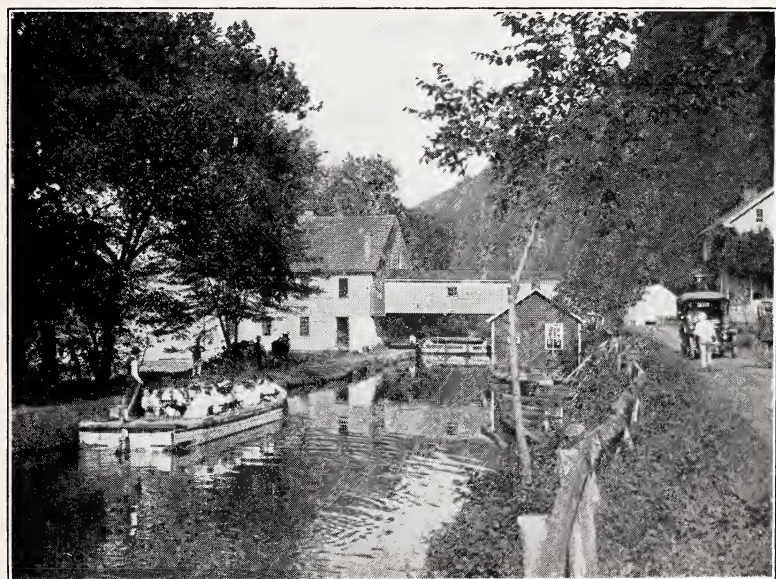
(Riegelsville Meeting, September 13, 1930)



THE hydraulic cement industry, which has revolutionized the building trades, the construction of bridges, dams and road making, and the economic conditions of the entire country as well, has made most wonderful and rapid progress in its manufacture and in the evolution of its processes, particularly since 1900, when the American-made Portland cement became better known, down to the present time when over 178,000,000 barrels are being made in one year. The total cement of all kinds made in the United States from its discovery in 1818, down to 1929 inclusive amounts to 2,881,647,337 barrels.

LIME MORTARS—There is no history to show when lime and sand mortars were first used, but its use dates back to the very dawn of history, as evidenced by its presence found in the oldest ruins of the world. The statement having been made to me that hydraulic cement had been used in building the wall around Jerusalem, I obtained a sample of the bond used in building the wall around the Temple Area, where King Solomon's temple stood (1000 B. C.), now occupied by the Mosque of Omar, but the examination showed it to be lime mortar.

HYDRAULIC LIME—Was first made in 1756, by Joseph Smeaton, an English engineer, who experimented with variations of the known processes of burning common lime made from pure limestone, in an endeavor to obtain a mortar having hydraulic properties. By hydraulic cement is meant a material that will harden under water, and in that respect differs materially from lime mortars. Smeaton had been employed by Parliament to build a lighthouse in the English channel, known as the Eddystone Lighthouse, where several wooden lighthouses had been wrecked by storms. He found that by burning soft clayey (argillaceous) limestone he could obtain a product which, although slaking with water, would also harden under water,



GRISTMILL AT NARROWSVILLE LOCK

Where cement was ground on buhrstones in 1829-33. The bridge over the lock was built to make the mill accessible after the lock was built. The top view shows the lock empty to receive boats going north; the other with lock ready to receive the pleasure boat "Zlotub" going south.

making possible the construction of his lighthouse, and establishing the process of making hydraulic lime, the first step toward the cements of later days.

HYDRAULIC "ROMAN CEMENT"—In 1796, James Parker, another Englishman, patented a process of burning argillaceous limestone. He pulverized his product, and obtained a material that would not slake with water, but had hydraulic properties, which he called "Roman Cement." This was the beginning of the natural cement industry, and the term "cement" has ever since been applied to such products which do not slake under water, as against the limes, common and hydraulic, which do slake.

NATURAL HYDRAULIC CEMENT MANUFACTURED IN AMERICA—The first natural hydraulic cement manufactured in this country was made by Canvass White, then a young man of 27, one of the engineers who built the Erie canal, the first canal to be built in this country, who in 1818 discovered a deposit of argillaceous limestone on the line of the Erie canal. After some experimentation he worked out a process for making cement which was used for building the locks, aqueducts, culverts and other masonry of that canal. The original plan was to use lime mortar, and point the work out with imported hydraulic cement. The Erie canal was built by the state of New York, and proved to be a great commercial and financial success. This was followed by the building of many canals throughout the eastern section of our country. Some of these *per se*, were not financial successes, but they contributed largely to the development of our country, and that fact must not be lost sight of as they were built before the days of railroads.

The building of canals naturally led to the manufacture of cement along their lines wherever possible to do so. The cement operations were crude, and as a rule the materials calcined in ordinary limekilns, but presumably at higher temperatures than when burning ordinary lime. Some of the kilns may have been specially built vertically, like those on the Lehigh canal to be referred to later. In all early operations the grinding was accomplished on ordinary buhrstones, such as were in general use at all gristmills.

THE LEHIGH CANAL—That part of the Lehigh canal from Mauch Chunk to Easton ($46\frac{3}{4}$ miles), begun in 1825 and completed in 1829, was built by Josiah White, Erskine Hazard and George F. A. Hauto. The management was under the supervision of Josiah White, an uneducated but a shrewd, resourceful man of Quaker stock. In 1827, two years after they began work, they employed Canvass White, who had aided in building the Erie canal, as their chief engineer. They manufactured their own cement, the first reference to which is contained in a report to the board of managers of the Lehigh Coal & Navigation Company, by Josiah White under date of January 12, 1828, in which he says:

"The discovery of hydraulic lime on line of the canal has afforded the advantage of giving greater permanency to the works without a heavy addition to the cost; and I have much pleasure in stating that I have recently discovered a method of producing artificially this invaluable article by compounding the materials of which it is composed and which are found to exist in the greatest abundance on the shores of the Lehigh. * * *" (Hazard's Register, Vol. I, page 91.)

In a brochure published in 1912 by William Glace, Esq., he gives his father, Samuel Glace (born 1805, died 1892), credit for building these cement kilns for the Lehigh canal, presumably under direction of Josiah White. He says there were two plants where cement was manufactured, the first on the west side of the river at Lehigh Gap, where, as discovered later, there was but a limited supply of cement-making material. That plant was abandoned in 1830, and a second one erected at Siegfried on the eastern side of the river. He describes the specially designed kilns, of which there were four at each plant, as ranging from 10 to 15 feet in height, those at Siegfried being the higher. He says they were conical in shape, sloping in at the top. The Siegfried plant was destroyed by the flood of January, 1841, and the location is now occupied by the Lawrence Cement Company. It is well-known that the Lehigh canal passes through the very heart of the great cement rock deposits of Lehigh and Northampton counties, in which two counties more Portland cement is being manufactured than in any other part of the world of like size, amounting in 1929 to about 23 per cent. of all made in the United States. I was told by James Smith, a noted contractor, that

even the lime mortar made from stone of that locality was of superior quality.

THE DELAWARE DIVISION CANAL—The State of Pennsylvania built the Delaware Division canal between Easton and Bristol (60 miles). It was begun in 1827, some boats passing through by 1832, but owing to faulty construction was not regularly opened until 1834. This is the canal, now under lease to the Lehigh Coal & Navigation Company, that flows through Riegelsville, past the place of this meeting, and is the only canal remaining in this country which continues to be operated by mule power.

HYDRAULIC CEMENT MANUFACTURED IN BUCKS COUNTY

We have records of two plants in Bucks County where natural hydraulic cement was ground for the Delaware Division canal, one at the Narrowsville locks, about four miles south of Riegelsville, the other in Solebury Township, near New Hope. These were both crude affairs.

NARROWSVILLE PLANT—The limestone for the Narrowsville operation was in fact quarried in Holland Township, Hunterdon County, New Jersey, opposite Monroe (now Lehighburg) in Bucks County, Pa., where it was burned in ordinary limekilns. On a draft of the survey of the Delaware Division canal, made in 1827, on file at Harrisburg, the location of the Holland quarry is indicated as "cement kilns." The clinker was loaded on Durham boats and floated down the Delaware, about three miles, to the Narrowsville gristmill, on the Pennsylvania side, in Nockamixon township, Bucks County, then owned by Samuel Rufe, where it was ground on ordinary buhrstones. This old gristmill stopped grinding some years ago; the water-power was obtained from the Delaware River by means of a wing-wall dam.

From an official report of H. G. Sargeant, general engineer of the Delaware Division canal, to Thomas G. Kennedy, the superintendent, under date of November 20, 1829, it appears that most of the hydraulic cement used on that canal was manufactured at the Narrowsville plant, and that they continued grinding during the season of 1830. This report is found in Hazard's Register, Vol. V, page 184, as follows:

"Lock No. 20 (the Narrowsville lock) would have been erected this season only that it is located directly in front of and occupies a part of the ground on which a gristmill now stands, where most of the hydraulic cement used on the line is manufactured, * * *

This operation is also referred to in the New Jersey Geological Survey of 1868, page 525, to which my attention was first called by my good friend, the late Dr. David T. Day of the United States Geological Survey. At that time I made for him a careful sampling of the exposed ledges in the Holland quarry near the river, and found it to be a dolomite with 20 per cent. of silica, and in that respect suitable for natural cement; the other constituents were 6.66 per cent. sesquioxide of iron and alumina, 40.56 per cent. carbonate of lime and 32.34 per cent. carbonate of magnesia. The magnesia was entirely too high for the Portland cement of a later day, the highest limit of which, formerly fixed by standard specifications at four per cent., was in 1916 advanced to five per cent. in the finished cement.*

William Piatt, known locally as "Lofty" Piatt, born February 28, 1818 (died April 24, 1908), who lived all his life near the Holland quarry, then a lad of 11 or 12 years, remembered this operation of quarrying the stone and burning it in the limekilns and sending it off on Durham boats for grinding at the Narrowsville gristmill, and on different occasions explained the operation to me. In like manner my grandfather, Michael Fackenthal, Jr., (1795-1872) often spoke to me about the manufacture of cement, as herein stated.

THE SOLEBURY TOWNSHIP OPERATION—The other Bucks County cement operation was at the limestone quarries of Asher Ely in Solebury Township, located about two miles north of New Hope and one mile west from the Delaware River. This

* Since presenting this paper two other dolomite quarries in Holland Township, near the Presbyterian Church, have been sampled; both are about 1,500 feet east of the Delaware River, where old limekilns are still in evidence. It is likely that cement clinker was also burned there, although the analyses with lower silica are not as suitable for cement as the higher silica in the quarry above referred to, which is located a few hundred feet farther north and much nearer the river. The analyses are:

	Nearest the Conglomerate	Farthest North
Silica.....	3.16	12.38
Iron and Alumina.....	2.24	4.92
Carb. of Lime.....	58.85	50.75
Carb. of Magnesia.....	35.81	31.30

limestone was also calcined in ordinary limekilns and ground in a gristmill nearby on the same property, located on Primrose Run, from which power was derived. This run discharges its water into the Delaware River at Philips gristmill, since converted into a community house. During July, 1930, I visited these quarries, accompanied by Dr. Benjamin L. Miller, professor of geology at Lehigh University, who is studying the limestone and cement deposits of Pennsylvania for the State Geological Survey, and John F. Magee, general engineer of the Alpha Portland Cement Company; we were piloted by Warren S. Ely, who was born on the adjoining farm and knew in detail by tradition the history of cement having been manufactured there. We examined two openings from which limestone is said to have been quarried for cement; these were sampled for analyses, the result shows them to be dolomites, one of them with enough silica and alumina for making natural cement, and from that one the supply was doubtless drawn. The analysis shows 16.80 Silica; 1.71 Sesquioxide of Iron; 5.01 Sesquioxide of Alumina; 57.60 Carbonate of Lime and 18.16 Carbonate of Magnesia. This quarry is now part of the property of Prof. Richard G. Wedderspoon, professor of landscape painting at Syracuse University, who makes his summer home there. At the time of our visit the quarry was being cleaned out preparatory to making a sunken garden of that part below the surface of the ground. The old abandoned gristmill where the clinker was ground is still standing. It belongs to William L. Ely, who is operating a stone-crushing plant nearby. The cement was manufactured by Asher Ely, grandfather of William, who was born on that farm July 11, 1768, (died August 12, 1855). His account books are in possession of William, and contain entries showing shipments from 1829 to 1833, mostly to contractors who built the Delaware Division canal, with its locks, culverts, aqueducts and other masonry. Thus we find shipments to Dorrance & Company, May 2, 1829, of 401 bushels of cement at 22 cents per bushel, about 60 cents per barrel; to John Van Gregory & Company, June 15, 879 bushels at the same price; to James Wallis of Bristol, August 15, 824 bushels, and on September 8, 900 bushels, both lots at 20 cents per bushel; to Lewis S. Coryell, October 22, 940 bushels; November 5, 1,015 bushels, and on December 5, 192½ bushels, all at 21 cents per bushel. These shipments all in the year 1829, cover the very time when

the canal was building. There are records of later shipments down to 1833, doubtless when the canal at New Hope was having the water-wheel erected to supply additional water from the Delaware River to feed the lower levels of the canal.

On the same pages of Asher Ely's account book, are also recorded shipments of lime, showing that cement was not confused with lime. Lime was sold at 15 cents per bushel; wood cost \$2.75 per cord; labor 50 cents per day, and no doubt long days at that. It appears from an old letter addressed to me by the late John Ruddle, then General Supervisor of canals, that the cement used on the Delaware Division canal was not of the same good quality as that used on the Lehigh canal.

ROSENDALE NATURAL CEMENT—Natural cement was made in large quantities in different localities and shipped under many different names, but that made in the Rosendale district in Ulster County, New York, deserves special mention. In 1898 nearly 42 per cent. of all natural cement made in this country was ground there. Shipments from that territory were mostly by Hudson River boats from Rondout, now part of Kingston. The Lehigh district during that year was third on the list, with shipments of but nine per cent.

CEMENT CONTAINERS—In earlier years all cement was packed in barrels, weighing about 376 pounds net, and the barrel has ever since been the standard of measurement. Barrels were gradually replaced with cotton sacks holding one-fourth of a barrel or 94 pounds of Portland cement. Cotton sacks can be used but four or five times until they are worn out. This burden falls mostly on the cement companies and is, indeed, a costly item. About 10 per cent. of them are not returned and about 16 per cent. of those returned are worn out and go to the scrap pile. The inventory of one large company, with offices in the Lehigh Valley, in 1922, contained an item of over 18 million cotton sacks, old and new, valued at \$1,462,896. The shipments of that same company in one year amounted to 64,216,648 cotton sacks, enough, when empty, to make 1,500 full car loads. Another company, whose headquarters are also in the Lehigh Valley, in 1925, had in like manner an inventory of \$1,000,000 for cotton sacks, all of which in a few years became a total loss. One might dwell on

the evolution of the cotton cement sack, and write an interesting paper, with illustrations, to show how many of them were converted, mostly by foreign laborers, into under-drawers.

Over the past few years large shipments of cement are being made in paper bags. These are patented and made with five separate layers of paper.¹ One company advises me that 39 per cent. of its shipments during 1929 were in paper, and another company advises me that 50 per cent. of its present shipments are in paper bags. This container may in time replace cotton sacks altogether, just as cotton sacks replaced barrels.

PORTLAND CEMENT DISCOVERED—Was first made in 1824 by Joseph Aspdin, a bricklayer of Leeds, England, by mixing limestone and clay, calling his product "Portland Cement," because blocks made with his mixture resembled in color and texture the oolitic limestone quarried on the Isle of Portland in the English channel. Although he did not burn his material to incipient fusion, which has since been made an essential point in this process, he was the first to use an artificial combination of argillaceous and calcareous substances and to him properly belongs the credit for making the first Portland cement, and the name he gave it has ever since adhered to it.

PORTLAND CEMENT IN AMERICA—To David O. Saylor, of the Coplay Cement Company, of Coplay, Lehigh County, Pa., must be given the honor of having made the first Portland cement in this country. He protected his process by letters patent dated September 26, 1871, but regular shipments from his new plant did not begin until several years later. This company had been manufacturing natural cement since 1866, and Mr. Saylor carried on successful experiments, obtaining an intimate mixture of argillaceous and calcareous substances in proper proportions, burning them to incipient fusion and pulverizing his product until he obtained a Portland cement, a product so superior to the natural cement then in use, that it became only a question of time when it largely replaced natural cement. The replacement was however quite gradual, because there was not full confidence given to it, and large quantities of imported Portland

¹ Since this paper was written paper bags with four layers of paper are gradually replacing those with five layers.

cement continued to be used. It was not until 1900 that shipments of Portland cement passed those of natural cement. In 1921, the proportion of natural cement shipments fell below one-half of one per cent., but over the past four years it has advanced to one and one-quarter per cent.

In the early manufacture of Portland cement the mixture was calcined in circular upright kilns, known as shaft kilns, at first using wood and later coal for fuel. It was not until 1886, long after Portland cement was in general use, that horizontal rotary kilns came into use; these at first were but 24 feet long. In 1909, Thomas A. Edison patented rotary kilns having a length of 150 feet and over. That length has been greatly exceeded until now such kilns are made 400 feet long. In the manufacture of Portland cement about three per cent. of gypsum is added subsequent to calcination.

AMOUNT OF CEMENT MANUFACTURED AND IMPORTED—The following table, prepared for me by John F. Magee, General Engineer of the Alpha Portland Cement Company, shows the output of all cement made in the United States since its discovery in 1818 down to the close of 1929; also a memorandum to show the amount of cement imported from 1878 to 1929 inclusive. Another memorandum shows some of the changes which have taken place in its processes and manufacture.

Raw Materials	Made pure dolom
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First Made By—Ancient Rom

Process of Manufacture	Hand- and fu only s
---------------------------	---------------------------

Final Preparation of Product	Calcin of wat The p slakes
---------------------------------	-------------------------------------

Hydraulic Properties	Morta hydrat
----------------------	-----------------

Tensile Strength	No pra adhesi
------------------	------------------

Chemical Composition of Finished Product	SiO Fe Al Ca Mg SO CO
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cement continued to be used. It was not until 1900 that shipments of Portland cement passed those of natural cement. In 1921, the proportion of natural cement shipments fell below one-half of one per cent., but over the past four years it has advanced to one and one-quarter per cent.

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DATA ON LIME AND CEMENT

HYDRAULIC CEMENTS			
LIMES			
Common	Hydraulic	Natural	Portland
Raw Materials	Made from relatively pure limestone or dolomite.	Made from impure or argillaceous limestone or dolomite	Made from an intimate mixture of properly proportioned or argillaceous and calcareous material. No magnesia.
		"Roman Cement" "Rosendale Cement"	
First Made By—Ancient Romans	Smeaton, England 1756	Parker, England 1796	Joseph Aspsden, England 1824
Process of Manufacture	Hand-sized rock burned in shaft kiln. Alternate layers of rock and fuel, wood or coal, placed in kiln and calcined at temperatures only sufficient to drive off carbonic acid gas—1000° to 2000° F.		Old Shaft Kiln Process Finely ground material moulded into briquettes and burned in kiln in alternate layers with coal to point of incipient fusion, 2500° to 3000° F. Modern Rotary Kiln Process Finely ground material fed directly to kiln in powdered form (dry process) or in form of slurry (wet process). Pulverized coal, oil or gas used as fuel and material calcined to incipient fusion—2500° to 3000° F.
Final Preparation of Product	Calined product slakes upon addition of water. The purer the lime the more readily it slakes.	Calined product does not slake upon addition of water. When finely pulverized with buhrstones (70% passing 200 mesh sieve) cementing properties develop upon addition of water.	Clinker does not slake upon addition of water. When finely pulverized with heavy machinery (78% passing 200 mesh sieve) cementing properties develop but cement is so active that gypsum is added to retard the set.
Hydraulic Properties	Mortar has no hydraulic properties	Mortar has hydraulic properties due to presence of silica and alumina	
Tensile Strength	No practical strength either cohesive or adhesive	Standard Specifications: 1 cement, 3 sand 7 days 50 lbs. sq. in. 28 days 125 lbs. sq. in.	Standard Specifications: 1 cement, 3 sand 7 days 275 lbs. sq. in. 28 days 350 lbs. sq. in.
Chemical Composition of Finished Product	SiO ₂ — 0.52 Fe ₂ O ₃ — 0.24 Al ₂ O ₃ — 4.43 CaO — 97.14 MgO — 1.28 SO ₃ — CO ₂ — .96	31.10 2.15 4.43 58.38 1.09 0.60 1.28	27.75 4.28 5.50 35.61 21.18 .50 4.05
			22.56 2.85 7.44 62.73 1.99 1.46 0.00

**OUTPUT OF ALL CEMENT MADE IN THE UNITED STATES FROM
1818 TO 1929, inclusive**

Years	Barrels Natural Cement ²	Per- cent- age	Barrels Portland Cement	Per- cent- age	Barrels made in United States	Barrels Imported Cement
1818 to 1829	300,000	100	0	0	300,000	
1830 to 1839	1,000,000	100	0	0	1,000,000	
1840 to 1849	4,250,000	100	0	0	4,250,000	
1850 to 1859	11,000,000	100	0	0	11,000,000	
1860 to 1869	16,420,000	100	0	0	16,420,000	92,000 in 1878
1870 to 1879	22,000,000	99.63	82,000	.47	22,082,000	106,000 in 1879
1880 to 1889	43,463,858	96.80	1,477,000	3.20	44,940,858	8,380,198 18.65
1890 to 1899	81,334,491	82.48	17,282,834	17.52	98,617,325	24,020,574 24.36
1900	8,749,130	50.77	8,482,020	49.23	17,231,150	2,386,683 13.85
1901	7,357,512	36.88	12,711,225	63.12	20,068,737	939,330 4.69
1902	8,522,860	33.10	17,230,644	66.90	25,753,504	1,963,023 7.62
1903	7,556,167	25.27	22,342,973	74.73	29,899,140	2,251,969 7.53
1904	5,169,376	16.29	26,505,881	83.71	31,675,257	968,409 3.06
1905	4,855,496	12.13	35,246,812	87.87	40,102,308	896,845 2.21
1906	4,537,021	8.90	46,463,424	91.10	51,000,445	2,273,493 4.46
1907	3,444,952	6.60	48,785,390	93.40	52,230,342	2,033,438 3.85
1908	1,838,313	3.48	51,072,612	96.52	52,910,925	842,121 1.59
1909	1,698,284	2.55	64,991,431	97.45	66,689,715	443,888 .67
1910	1,235,190	1.59	76,549,951	98.41	77,785,141	306,863 .40
1911	1,019,321	1.28	78,528,637	98.72	79,547,958	164,670 .20
1912	913,095	1.10	82,438,096	98.90	83,351,191	68,503 .08
1913	851,971	.92	92,097,131	99.08	92,949,102	84,630 .09
1914	819,596	.92	88,230,170	99.08	89,049,766	120,906 .14
1915	793,541	.92	85,914,907	99.08	86,708,448	42,218 .05
1916	842,137	.91	91,521,198	99.09	92,363,335	1,836 .01-
1917	639,456	.68	92,814,202	99.32	93,453,658	2,323 .01-
1918	432,966	.61	71,081,663	99.39	71,514,629 ³	305 .01-
1919	528,589	.65	80,777,935	99.35	81,306,524	8,931 .01
1920	767,481	.76	100,023,245	99.24	100,790,726	524,604 .52
1921	539,402	.46	95,507,147	99.54	96,046,549	122,322 .13
1922	889,428	.75	117,701,216	99.25	118,590,644	323,823 .28
1923	1,271,674	.93	135,912,118	99.07	137,183,792	1,678,636 1.22
1924	1,418,461	.96	146,047,549	99.04	147,466,010	2,010,936 1.36
1925	1,751,725	1.10	157,295,212	98.90	159,046,937	3,655,317 2.30
1926	2,031,851	1.24	162,187,090	98.76	164,218,941	3,232,386 1.97
1927	2,158,323	1.23	171,864,728	98.77	174,023,051	2,050,180 1.18
1928	2,213,645	1.25	175,838,332	98.75	178,051,977	2,284,085 1.28
1929	2,159,130	1.25	169,868,322	98.75	172,027,452	1,727,900 1.01
	256,774,442	8.91	2,624,873,095	91.09	2,881,647,537	66,009,345
⁴ 1930	1,787,016	1.11	159,059,334	98.89	160,846,350	975,546 .61

² Includes Puzzolan Cement.

³ In 1918, during the World War, the manufacture of cement fell to a minimum, and the imports to 305 barrels.

⁴ Statistics for 1930 obtained after this paper was written.

New Light on the History of Tin Plating

By RUDOLF P. HOMMEL, RICHLANDTOWN, PA.

(Riegelsville Meeting, September 13, 1930)

THE writing of this paper was suggested by a paper which Dr. Mercer, our late president, read before this society at the Chalfont meeting, October 22, 1912, on the "Common Tinder-Box of Colonial Days" (See Vol. IV, page 360).

In that paper he referred to the history of tin plating and gave all the data then available to him.

Tin plating was of great importance in Colonial days, as can readily be seen if we recall the tinder-box made of tinned sheet iron found in almost every home, as well as other articles such as perforated stable lanterns, coffee-pots, knife boxes, candlesticks, tin kitchens and such other like utensils. With these facts in mind you will better understand why I am submitting this paper to our society, rather than to one of the scientific bodies where papers of a technical nature ordinarily belong.

The early history of tin plating in England has heretofore been linked with the name of Andrew Yarranton. He relates in his book, "England's Improvement by Sea and Land" (Gent. 1698), how he was sent to Saxony to learn the process of tin plating. He succeeded and was able to induce some German platers to come with him to England. Regarding the history of tinning plate-iron he relates that the art was first practiced in Bohemia and that thence it was brought to Saxony about the year 1620 and that thereafter the whole of Europe was supplied with tin-plate from Germany.

The German notion about the origin of tin-plating as expressed by Beckmann (History of Inventions, 1799), and held since that time, is that it was invented either in Bohemia or Germany. Feldhaus (Die Technik der Vorzeit, Leipzig and Berlin, 1914) gives as earliest date 1546, when George Agricola mentions the plating of the heads of iron pins with tin, and 1551, the date when Hans Freiherr von Ungnad received the permission to carry on the plating of sheet iron at Waltenstein in Styria.

Much earlier reference to tin-plating I found in the "Schedula Diversarum Artium" by Theophilus Rugerus, probably of Heltershausen, who wrote in the 12th century. He gives directions

for tinning of iron in Liber III, caput XCI. Pickling with acid does not seem to have been known then, for he advises to file the parts which should be plated, and not to touch them again with the hand, but put the article into the pot of molten tin with tallow on the surface, and stir it around until the articles become white. After removal from the pot the plated article should be shaken and cleaned with chaff and linen.

Further interesting data about the origin of tin-plating yielded a publication,¹ issued in the year 1928 by the city of Wunsiedel (Bavaria), to commemorate its having been raised to the dignity of a free city six hundred years ago. Learned archivists have in this memorial brought to light curious facts about the early history of Wunsiedel and it appears that the art of tin-plating was practiced there long before it became known in Bohemia and Saxony.

Legends² current in the Fichtelgebirge relate that in olden times foreigners came to prospect for precious ores. In this connection it is interesting to recall that Mathew Paris (ca. 1200-1259) in his *Historia Anglorum* relates how a Cornish man fled his country after having committed a murder and discovered afterwards in Germany tin in the year 1241. Another, equally interesting point, worthy of mention is that in Cornwall and Devon, the English tin-producing districts, there were so-called Stannary Courts to the regulations of which all the tin mines were subject. The court is mentioned already in two charters of King John (1199-1216). The Stannary Prison was in Lydford and its evil reputation is still current in West Devon in the saying, "Lydford law, or hang first and try afterwards."³ Of the tin industry in the Fichtelgebirge we know that in the 15th century its increasing importance led to the establishment of a Zinnergericht, Stannary Court, in Wunsiedel and in Weissenstadt.

Caspar Bruschius in his description of the "Vichtelberg" of 1542 says that Wunsiedel is indebted for its first development into a community to the exploitation of tin mines which were worked in the neighborhood already in the 14th century.⁴ It is

¹ Jubilaeums-Schrift der Stadt Wunsiedel 1326 and 1328 to 1928. Published by the City of Wunsiedel, 1928.

² Loc. cit., page 153.

³ Dartmoor and Its Antiquities by J. L. W. Page, London, 1889.

⁴ Jubilaeums-Schrift, page 107.

also expressly stated⁵ that the fame of the tin industry of the Fichtelgebirge was due to the tinning of nails and sheet iron which was carried on in Wunsiedel, as documents show, already in the 14th and 15th century.

A new era dawned for the tin-plating industry in Wunsiedel through the efforts of Sigmund Wann (died in 1469). He lived at a time when Margrave Johann, called *Alchymista*, reigned in Bayreuth from 1440-57. Young Wann, the son of a Wunsiedel baker, followed the trade of his father, and as a journeyman on his prescribed tour went to Venice. By chance he met, and was received into, a secret society of alchemists, and later eloped with a woman from their midst. Arriving at his home he married her and both then carried on the trade of tinning (*Zinnerei*). The tradition also has it that they knew how to separate gold and silver from the tin ore, but certain it is that Wann practiced the tinning of sheet iron on a large scale and in the course of time made a large fortune from which he freely gave (ca. 1452) to build a church and to found and richly endow a hospital. The Wunsiedel product of tinned goods was sold in Nuremberg, Frankfurt on Main, Naumburg, Leipzig and Breslau, and found its way into distant countries. At the Leipzig Fair alone Wunsiedel tin plate realized usually more than 4,000 florins (a florin was about 50c). To easily recognize the Wunsiedel product the tinned sheets were stamped with an eagle and a lily. The tin was produced in the Fichtelgebirge and the iron came from the adjoining Upper Palatinate (Oberpfalz).

The enormous dimensions of the business roused English enterprise and it was long before Andrew Yarranton's time that English merchants made efforts to procure the secrets of manufacturing tin-plate. About 1596 a Nuremberg export merchant was approached by one of his English customers to try and persuade some of the Wunsiedel tanners and sheet iron beaters (*Blechschlager*), no doubt for enticing considerations, to leave their home and proceed to England, and there introduce their flourishing trade of tinning. The Nuremberg merchant complied and the next time he met some of the Wunsiedel tanners he took them into his confidence and had willing listeners. They showed themselves willing to further the plans and received earnest-money. Apparently to make the final arrangements

⁵ Loc. cit., page 108.

they left Nuremberg for Wunsiedel, but actually with resentment in their hearts they denounced the merchant in every inn on their way back and bragged how they had fooled him out of the earnest-money, which they considered a well applied fine. A hundred years later this flourishing trade had almost died out in Wunsiedel. The reason was that the trade had spread to Bohemia and Saxony where the manufacture could be carried on cheaper and whence the ware could be shipped via the rivers Moldau and Elbe directly to Hamburg and intermediate points.

Further search in the archives of Wunsiedel may bring to light some more data about the early history of tin plating. Tin plating was known before the time of Sigmund Wann, and the reason for the business to assume such large proportions seems to have been that he improved the manufacture. Perhaps it was that he introduced the process of pickling the sheet metal with acids. Theophilus in the 12th century did not yet practice it. In fact the knowledge of acids came from the Arabians, and from the Anterior Orient it naturally would have spread northward via Spain and Italy. I take it as not without significance that the meager accounts of Sigmund Wann stress the point of his connection with alchemists in Venice, the very source from which he could have secured valuable information to further the tin plating industry.

Oil Portrait of Henry Chapman Mercer, Sc. D., LL. D.

PRESENTED BY MR. ALBERT ROSENTHAL OF HUFFNAGLE HOUSE,
BUCKS COUNTY, PA.

UNVEILED AT FONTHILL, MAY 13, 1931

PRESENTATION ADDRESS OF MR. ROSENTHAL

SOME thirty years ago, when engaged in developing the series of Portraits of the Signers of the Constitution of the United States for Independence Hall. I had among my photographs one of James Francis Mercer, Signer from Maryland, from a miniature by Robert Field, with this inscription, "Owned by William R. Mercer, Doylestown, Pennsylvania." I had etched this portrait some years before. I wrote to Mr. William R. Mercer (the elder), asking permission to copy the miniature. In reply I received a delightful letter "that he was pleased to accede to my request and he would be glad to have me come to Doylestown to do the work and that I should bring my grip along and stay awhile, and that I would enjoy driving with him around the beautiful country. "It will give me an opportunity to repay the courtesies, you showed my son, some years ago." Here for the first time, I met Dr. Henry C. Mercer. And during the years following, I had the pleasure of seeing him in Philadelphia and calling on him in Doylestown.

When I purchased the Huffnagle place (near New Hope), he phoned me and expressed his pleasure and gratification that it had come into my hands, assuring, he said, a real restoration. Subsequently, he called a number of times at Huffnagle to see its development and presided at the meeting of the Bucks County Historical Society, held there in 1928. I can recall no one in my generation, in Pennsylvania, who held such a position locally, nationally, and internationally as Dr. Mercer. His activities have resulted in things of permanent value, unusual and logical and constructive in character. It was a real pleasure to me to paint this portrait, and to present it to "Fonthill." I feel it an honor and distinction, to thus have associated myself with him and to have this portrait in this wonderful building. This monument to his free, untrammelled and audacious personality.

REMARKS OF DR. B. F. FACKENTHAL, JR.

President of the Trustees of the Mercer Fonthill Museum

On Accepting the Portrait of Dr. Mercer

Mr. Rosenthal: I am delighted to accept this portrait of Dr. Henry C. Mercer, not only in my official capacity as president of the Fonthill Trustees, but also for the peculiar pleasure that it gives me personally.

I congratulate you, sir, on the wonderful and faithful likeness which your brush has given us. I am pleased too that it is to be hung in Fonthill, the creation of his genius, which Dr. Mercer loved so well, and where he made his home over the last eighteen years of his life.

Two oil paintings hang on the walls of the Bucks County Historical Society's museum. One, "The Rescue of the Colors at the Battle of Fair Oaks," by William T. Trego, a son of Bucks County, presented by John Wanamaker in 1899, which tells a most interesting story.

It was Dr. Mercer, himself, who told me of a letter he had received from a distinguished foreigner who had visited our museum during the lifetime of General Davis, who, standing before that canvas explained to him the details of that battle, and pointed out his own portrait. On his return to Europe, after touring the United States, this visitor wrote to Dr. Mercer, saying that one of the things that impressed him most in America, and that would linger in his memory, was the living portrait of that aged man, the hero of two wars, standing before that historic picture and living over again the years of his younger life.

The other painting is from the brush of Daniel Garber, another adopted son of Bucks County, presented to our Historical Society June 15, 1918, of the so-called Whittier House, located on the Healy Farm in Solebury Township, where the Amesbury poet lived from 1837 to 1840, and where he wrote some of his poems, which gives this old house its historical value.

And now another adopted son of Bucks County, Albert Rosenthal, has presented to Fonthill, an institution closely allied to our museum, this splendid portrait of that great student, potter and scientist, Dr. Henry C. Mercer. I know that the painting of this portrait had been for him a labor of love and because of his admiration for Dr. Mercer, and that Mr. Rosenthal has taken

peculiar pleasure in the study and painting of his friend in honor not only of us, his living friends, and the County of Bucks, but to the history of the world as well.

Again I thank you, Mr. Rosenthal, on behalf of the Trustees of Fonthill for this wonderful life-like portrait, but still more for the happy thought that inspired its creation.

* * *

Addresses of appreciation were also made by Col. Henry D. Paxson, E. Wesley Keelor, Esq., and Rev. G. M. Whitenack, Jr.

Early History of Keller's Lutheran Church, Bedminster Township, Bucks County

By REV. WILLIAM J. HINKE, Ph. D., D. D., AUBURN, N. Y.

(Doylestown Meeting, May 2, 1931)

SOME years ago, while collecting data for the history of the Tohickon Lutheran Church, the writer ran across what seemed to him a surprising fact, one altogether neglected by earlier historians, namely, that there were two Lutheran congregations near the Tohickon creek, both of them called Tohickon or Tohecka in the early records. The natural result has been, that these two churches have been badly confused and that references which properly belong to one church were attributed to the other. The first of these is Tohickon Union Church, near the village of Keelersville, in the extreme western corner of Bedminster township, and the other is Keller's Church, in the upper end of Bedminster township, "standing upon a prominence along the Ridge road with the Tohickon creek winding along its base." These two churches, about $3\frac{1}{2}$ miles apart, were never served by the same pastors, but the references to them in historical documents have been constantly confused.

The very first reference to Tohickon in the Halle Reports, the well-known letters sent by Muhlenberg and his associates to their friends in Halle, Germany, has suffered this fate of being misinterpreted. On June 15, 1754, Rev. Henry M. Muhlenberg wrote to Dr. Francke at Halle as follows:

"At a river called Tohicon, about twenty-two miles from Providence [now Trappe, Muhlenberg's home] there is a fairly large congregation of High German Lutherans, who for ten years [1744-1754] have been visited as much as possible by our Ministerium, and was last served by Messrs. Rauss and Schultz. But, inasmuch as the congregation is somewhat remote, also too poor to support a minister alone, indeed is not able to raise even the half or the third part of a sufficient salary, in union with other congregations, and as it ought to have services every second or at least every third Sunday . . . we are much perplexed about it. The congregation has built, with great effort and cost, a schoolhouse and parsonage. But we do not know how

to help them, because the financial support is lacking. They are very sad that we cannot help them, as we would like to do, and they believe that they are abandoned for other reasons." (Hallesche Nachrichten, new ed., Vol. II, p. 186.)

I. PASTORATE OF THE REV. LUCAS RAUSS, JULY, 1751, TO AUGUST, 1753

We must now add the first reference to Tohecka (Keller's) in the minutes of the Lutheran Ministerium of Pennsylvania. On June 17, 1750, two delegates from Tohecka were present at the third meeting of the Ministerium at Mr. Muhlenberg's home at Providence. (Minutes, p. 28.) These two references to Tohickon find no support in the Tohickon record, but they are confirmed throughout by the Keller record. Hence they must apply to Keller's church. Both Muhlenberg and Keller's church record agree that Lucas Rauss was the first pastor at Keller's church near the Tohickon. Rauss opened the Keller record with an elaborate title page, part of which may be translated as follows:

"Church Record or Protocol of the Evangelical Lutheran Congregation at the Toheka, [begun] by me Lucas Rauss, regularly called pastor." On page 3 of the record, Rauss has entered an interesting statement about himself:

"In the year of the gracious birth of our Lord and Saviour Jesus Christ 1751, I, Lucas Rauss, born at Cronstadt, in Siebenburgen [Transylvania] received a call to the forsaken Evangelical Lutheran congregation at the Toheka, in Bedminster township, Boox [Bucks] county, Pennsylvania. The call was handed to me in New York by his Reverence, Mr. Henry Melchior Muhlenberg. It was signed by the three oldest ministers of the United Evangelical Ministerium in Pennsylvania. As a result, immediately, namely on June 8th (old style), of the same year, I began my journey to Pennsylvania, and, under the divine protection, I reached New Providence on June 15th. Thereupon, on July 7th of this year 1751, in the name of the great Jehovah, I delivered my introductory sermon. May the Lord of the harvest, according to His infinite mercy and His burning love for mankind, gather much precious wheat upon this field into His heavenly barns and may He grant to all spiritual planting and watering His increase."

The arrival of a settled pastor stirred up considerable activity

in the congregation. On August 14, 1751, the church record was bought for nine shillings. On August 17th, a warrant was taken out for the church land, for which warrant two shillings and six pence were paid. The church land was surveyed on February 6, 1752, and was found to contain 20 acres and 12 perches. It was granted to Henry Acker, Henry Keller and Christian Stoneback, as trustees of the congregation. But the trustees failed to secure a patent for the land and it was not until May 7, 1857, that the transaction was concluded and the patent was issued upon the payment of 60 dollars and 47 cents.

The congregation also set to work, almost immediately, to build a schoolhouse, in which divine services were held. On March 30, 1752, Rauss records a baptism of Abraham Nicla, son of Valentine Nicla and of his wife, Anna Elizabeth, which took place in the schoolhouse, at which Abraham Deck, schoolmaster, and his wife, Anna Maria, acted as sponsors. The parsonage was probably erected at the same time, for in 1754 Muhlenberg refers to it as in existence. Rauss entered into the record twenty-five baptisms, beginning July 28, 1751, and ending August 26, 1753, and during the same time also seven burials. From his entries we might infer that he was a fully ordained minister, when he came in 1751, but such was not the case. In his report of 1751, Muhlenberg states:

"I announced to the congregations [Old Goshenhoppen, Indianfield and Thicken] that we did not know of a minister for them. That they could have neither Mr. Kurtz nor Mr. Schrenck, but that there was a student who could serve as catechist, namely Rauss, whom they had heard a few times. He was at their service on trial for a year. They answered that if they could not have Mr. Kurtz, they would take Mr. Rauss on trial. I replied, that I could not do this by myself, that they would have to present a written request at our next meeting, which was done, they asking for our supervision and care as well as for Mr. Rauss, until we could help them in some better way." (H. N., II, 10.)

Turning to the minutes of the Ministerium for 1751, we find these statements fully corroborated. They state:

"Old Goshenhoppen and Indianfield have called the catechist, Mr. Rauss, as their regular teacher, and this shall be granted

them as soon as possible, if he will accept their call." (Minutes, p. 35.)

The church record confirms another statement of Muhlenberg, namely, that Rauss and Schultz (who was pastor at New Goshenhoppen) labored together at Keller's church, for we find that the first confirmation entered into the record, was held May 31, 1752, by Mr. Schultz (Record, p. 295). Frederick Schultz arrived in Pennsylvania in 1751, was made Muhlenberg's assistant in New Hanover, where he also resided. From there he supplied every two weeks New Goshenhoppen and from 1753-1755 also Indianfield. While stationed at New Hanover, he made occasional visits to Keller's church, to administer the communion and confirm catechumens, until Rauss himself was ordained in 1752. On November 5, 1752, Rauss together with Mr. Schrenck were ordained to the ministry, in the church at Providence, "to lighten the toil and labor of the older ministers, and also by reason of the necessity of the circumstances," as the Minutes put it. (Minutes, p. 39.)

After his ordination Rauss remained at Keller's and affiliated churches until the fall of 1753, when Muhlenberg offered to send him to York. Rauss indignantly rejected this offer, saying, the members of the Ministerium wanted to get rid of him, by sending him so far away as to endanger his life. (H. N. I, 663.) Rauss quarreled not only with Muhlenberg, but also with his churches. Hence he was compelled to retire from Indianfield and Tohickon (Keller's), in the fall of 1753, but he maintained himself at Old Goshenhoppen until 1758, when he removed to York county. There he continued as an independent Lutheran minister, preaching to some rural churches, but he also practiced as a physician. He died there July 11, 1788.

Rauss rendered one important service to Keller's church. He entered the names of the earliest church members into the church record, recording not only the names of the male members but adding the names of all the other members of the earliest families, together with the places of their nativity and the dates of their coming to Pennsylvania. As this information will no doubt be of interest to their descendants, we give the main facts from the record. In September, 1751, the following persons were members of the congregation:

I. NAMES OF ELDERS:

1. HENRY KELLER, b. Jan. 9, 1708, at Wyerbach, Naumburg-Baden; married Oct. 20, 1728, Juliana, da. of Peter Kleindienst of Wyerbach. They had ten children. They came to Pennsylvania, Sept. 19, 1738.
2. HENRY ACKER, b. 1700, son of Henry Acker, of Spabach, in Alsace; married 1728, Anna Catharine Schaefer of Frischdorf. They had thirteen children. They came to Pennsylvania in 1732.

II. NAMES OF DEACONS:

1. CHRISTIAN STEINBACH, b. Dec. 25, 1710, at Rublingen in Langenburg-Hohenloh; married 1732 Anna Dorothea Schafer. They had nine children. They came to Pennsylvania in 1732.
2. ANDREW ZIEGENFUSS, b. 1726, at Beydenkirchen in Darmstadt; married Feb. 1748, Anna Madgalene Laurenz. They had two children in 1752; came to Pennsylvania in 1738.

III. NAMES OF CHURCH MEMBERS:

1. JACOB LOCH, b. about 1684, at Weyerbach, in Naumburg-Baden; married twice, his second wife Anna Sybilla in Sept. 1719. They had seven children; came to Pennsylvania in 1739.
2. VALENTINE NICLA, b. 1719, at Weibelskirchen, in Nassau. In 1738 he married Elisabeth Schenck. They had eight children. They came to Pennsylvania in 1738.
3. STEPHAN ACKERMANN, b. May 7, 1700, near Heilbronn, Wurtemberg. Married in Aug. 1731, Eva Braun. They had twelve children. Came to Pennsylvania 1738.
4. JOHN GEORGE SCHWARZ, b. at Hinterbach, in the principality of Erbach. Married in 1738 Anna Barbara Repscher. They had six children. Came to Pennsylvania in 1749.

5. JOHN PHILIP ZIMMER, b. April 2, 1723, at Traben, in Burkenfeld. Married in 1745, Maria Margaret Heinz. They had three children in 1752. They came to Pennsylvania in 1748.
6. JOHN MICHAEL FISCHER, b. Aug. 21, 1725, at Idar in Oberstein-Leiningen. Came to America in 1746. Married in 1750, Anna Dorothea Acker, da. of Henry Acker.

Rauss also records that "Jacob Loch, Valentine Nicla and Stephan Ackermann were installed by the Rev. Handschuh on November 14, 1751, as church elders at Tohecka, in the house of Henry Keller." These elders probably took the places of those mentioned in the above membership list, which bears an earlier date.

II. PASTORATE OF THE REV. JOHN HENRY SCHAUM, OCTOBER, 1754, TO AUGUST, 1758

When Rauss retired from Keller's church, he was succeeded by JOHN HENRY SCHAUM. Schaum had been ordered to leave York as soon as possible and assume charge "of the smallest and poorest congregation at the Tohickon, to preach there and to keep school." (H. N., I, 663.) In December, 1756, Muhlenberg reported: "Mr. Schaum in Tohecka has been recovering his strength for some time. Nevertheless, he can hardly be in any other than miserable circumstances, as his congregation is very poor." (H. N., II, p. 214.)

According to Keller's church record Schaum came to Keller's in October, 1754. From that time to August, 1758, he entered 39 baptisms into the record. On November 30, 1755, John Henry Schaum and his wife Dorothy had a son, Philip Henry, baptized. The father himself entered the baptism. In the financial accounts for the year 1758, it is stated that Christoph Siegman, the treasurer, paid the Rev. Mr. Schaum five shillings as salary. If that was the quarterly payment, the total salary was pitifully small.

John Henry Schaum was the son of a pious schoolmaster, born in the neighborhood of Giessen, Germany. He received

his education in the institutions of Dr. Francke at Halle and at the university of Halle. In 1745, he came to Pennsylvania. He was at first sent as schoolmaster to Germantown. In 1747, he was transferred to Raritan, New Jersey. In the following year he accepted a call to York. In 1749, he was ordained at Lancaster. He labored in York and neighboring churches until a division occurred in his churches, when it seemed wise to transfer him to another congregation. Through the instrumentality of Muhlenberg he came to Keller's. In February, 1758, Muhlenberg wrote about his ministry:

"Mr. Schaum has served one or more little flock at the Tohikon creek and during the winter he has taught school. In worldly things he has been content to live in poverty, because the people among whom he lives are mostly poor. If God permits and conditions allow, I would gladly take him next spring as my assistant in my congregations at Providence and New Hanover." (H. N., II, p. 247.)

In the year 1759, Schaum actually moved to Falckner Swamp, where he assisted Muhlenberg and also preached at Oley, Pike-land and Lower Dublin. In the spring of 1762, he took up his residence in the territory of his congregations, residing at White-hall, Lehigh County. When in the following year Moselem, in Berks County, became vacant, he accepted a call from that congregation. He preached there until his death, January 26, 1778. Schaum was highly esteemed by Muhlenberg, being one of his most faithful co-laborers.

III. PASTORATE OF THE REV. WILLIAM KURTZ, SEPTEMBER, 1758, TO OCTOBER, 1760

Schaum's successor at Keller's church was WILLIAM KURTZ. He also had been trained in the orphanage of Dr. Francke at Halle, had studied theology in Germany and had come to Pennsylvania (whither his brother, John Nicholas, had preceded him) in 1754. Shortly after his arrival he became the assistant of Muhlenberg at Providence. In September, 1758, he was sent as catechist to Tohickon (Keller's), under the supervision of Muhlenberg. In October, 1758, Rev. John F. Handschuh reported to Halle: "Mr. Kurtz is still holding forth bravely with the

people at Tulpehocken and his younger brother is at present on trial at Tohecka." (H. N., II, p. 254.)

In the Keller's church record there are thirteen baptisms entered by Mr. Kurtz, extending from September, 1758, to October, 1760. The last baptism which he entered is that of his own daughter, Susanna, born August 8th, baptized October 2, 1760. Among the miscellaneous entries, there is an interesting item relating to Mr. Kurtz. "On Dec. 13, [1758] I, Wm. Kurtz, have given from the alms money six pence good currency to a poor Irishman, provided with good testimonials." (Record, p. 369.) Kurtz was ordained in Lancaster in 1761. He then became his brother's assistant at Stouchsburg and Bernville, 1763-1764. From 1764-1779, William Kurtz served New Holland and Conestoga, in Lancaster County, after that he moved to Lebanon, where he ministered until his death. (H. N., II, p. 232.)

The departure of Kurtz from Keller's at the end of the year 1760, marks a turning point in the history of the congregation. It passes now under the control of independent Lutheran ministers, men about whom little is known.

IV. PASTORATE OF CONRAD DANIEL WALTHER, FEBRUARY, 1761, TO NOVEMBER, 1761

The first of these independent ministers, not in connection with the Lutheran Ministerium of Pennsylvania, was CONRAD DANIEL WALTHER. His name appears on page 170 of the record, in a list of communicants, who communed on May 10, 1761. He enters his name in the list as "Conrad Daniel Walther, p. t. pastor" and Mary Magdalene, his wife. On page 295 of the record Mr. Walther enters a list of catechumens, to which he prefixed this heading: "Anno 1761, May 10th, being Pentecost, the following children were confirmed by me, Rev. Walther." Among the baptismal entries Walther entered on pages 151-152, nine baptisms, from February 22, 1761, to September 6, 1761. Another communicant list was entered by him, dated November 2, 1761, so that his ministry seems to have extended from February to November, 1761. Where he came from or what became of him afterwards is unknown to the writer. His name is not found in any Lutheran source book or history accessible at present.

V. PASTORATE OF OTTO HAASE, APRIL, 1762, TO APRIL, 1764

Walther was succeeded by OTTO HAASE, another independent minister, about whom little is known. He arrived at Philadelphia on the ship Elizabeth, September 5, 1751. In 1762, he began his ministry at Keller's church. He heads his baptisms with the following statement: "1762, at this time, I, Otto Haase, through the divine call of my Lord and Saviour Jesus Christ was called to be the public teacher, preacher and schoolmaster of the congregation." He entered thirty baptisms from April, 1762, to April, 1764.

It was during the ministry of Haase that an important event occurred, mentioned by Muhlenberg in his diary for the year 1763. It was the building of a church, about which Muhlenberg writes as follows:

"On Wednesday, February 2nd [1763] towards evening some men from the Tohicon congregation came to see me and asked for a collection towards their new church building. I gave them my mite, but told them to look for more from other friends." (H. N., II, p. 523.) This cannot refer to the church now known as Tohickon, because that had been an independent church from the beginning, with which Muhlenberg had had no dealings. It must have been Keller's church on the Tohickon, to which Muhlenberg refers constantly as Tohicon or Toheka. Besides, the church at Tohickon was not dedicated until 1766. It certainly did not take them three years to build a church. Every consideration, we believe, favors the conclusion that the church to which Muhlenberg made a contribution in 1763 was Keller's church at the Tohickon.

VI. PASTORATE OF JOHN MICHAEL ENDERLEIN, AUGUST, 1766, TO JULY, 1770

In the year 1766, we find a new preacher at Keller's church. It was JOHN MICHAEL ENDERLEIN. He entered his first baptism on August 10, 1766. From that date to July 1, 1770, Enderlein entered forty-three baptisms. Two of the baptized were his own children. On March 1, 1767, was baptized John Paul, son of John Michael Enderlein and his wife, Anna Barbara. A son Peter was baptized October 29, 1769. When Enderlein

came to Keller's church, he was still a catechist. This is stated by Muhlenberg himself. He writes, under date October 31, 1778: "The catechist, Mr. Enderlein, who years ago was awakened in the revival services of the sainted Rev. Mr. Stark at Frankfurt, kept school in Philadelphia for some time, was then sent to some distant congregations as catechist, and of late lived with his family at Shamokin, has now become an exile, having been compelled to flee, because of the uproar made by the hostile Indians, together with other inhabitants of that place." (H. N., II, p. 733.) This statement of Muhlenberg is corroborated by the church record. On page 296 of the record we find an entry of catechumens, who were confirmed on April 24, 1766, by Mr. Boskirk, pastor of Germantown, because as catechist Enderlein could not confirm them.* But the entry in the record was made by Enderlein. It is in his handwriting. On April 3, 1768, Enderlein himself entered a number of catechumens, with the following statement: "Names of the children who were confirmed on Good Friday, April 1, 1768, and admitted to the Lord's Supper on Easter, April 3, 1768, by me, John Mich. Enderlein."

Enderlein also entered ten marriages, from September, 1766, to April 24, 1770. Among them is one which deserves notice. It reads: "On February 6, 1770, there were married by Christopher Gobrecht, the Reformed minister (who sent me the certificate signed by his own hand), John Philip Lambach, schoolmaster, a widower, and Barbara Benner, daughter of Peter Benner, single, both Reformed." I am inclined to think that the reason why Gobrecht sent this marriage record to the Lutheran minister was because Lambach was the schoolmaster of the Lutheran church school, in the schoolhouse at Keller's church.

During part of the time that Enderlein was at Keller's church, namely, during the years 1769 and 1770, he also officiated at the Indianfield Lutheran church, where he entered ten baptisms.

When Enderlein left Keller's church in 1770, it was apparently without a regular preacher for some time. In June, 1772, eight baptisms were entered in the record, but we cannot tell by whom. Most likely by a visiting preacher. In September of the same year, the minutes of the Lutheran Ministerium report verbal information sent to the "remaining vacant congregations

* This confirmation may have taken place before the arrival of Enderlein.

on the Tohecka," that they could not at present be cared for. (Minutes, p. 131.)

In 1773, the minutes of the Ministerium report a petition from the congregations in Indianfield and Tohicon "for a preacher who would suit their conditions, because they do not yet have a parsonage and can raise only a small salary, and would like to have a gifted preacher." (Minutes, p. 141.) The Ministerium replied, that the nearest minister in Goshenhoppen, "would, God willing, visit them as soon as possible and serve them with the means of grace, until we could see how matters will go in future." (Minutes, p. 142.) We are unable to say whether God was unwilling that the Goshenhoppen pastor should visit Keller's. At least there are no communicant lists in the record between 1770 and 1774. The congregation was most likely vacant during this period.

VII. PASTORATE OF PETER FREDERICK NIEMEYER, MAY, 1774, TO DECEMBER, 1783

The next minister to officiate at Keller's church was PETER FREDERICK NIEMEYER, another independent preacher, for whom one looks in vain in the official Lutheran records. He landed in Philadelphia on the ship *Queen of Denmark*, September 11, 1752. What became of him during the next twenty-two years we have not been able to discover. In May, 1774, he appears as the pastor of Keller's church. On Pentecost, 1774, the record states: "The following persons were admitted to confession and the Holy Communion by me, Rev. Fred. Niemeyer." His baptisms begin May 26, 1774. From that date to December 7, 1783, he entered 144 baptisms. From 1774 to 1782, Niemeyer was also ministering to the Indianfield Lutheran church, where he entered 101 baptisms. On May 26, 1782, Hannah Niemeyer and Elizabeth Niemeyer, two daughters of the pastor, appear among the catechumens of that year, who were confirmed.

VIII. PASTORATE OF ANTHONY HECHT, AS CATECHIST, 1784-1788

With the departure of Niemeyer another vacancy occurred. In May, 1785, the Lutheran Ministerium reported: "The congregations at Tohicon, Upper Dublin and North Wales desire to

have MR. HECHT, who formerly kept school, as their preacher, and petition the Ministerium to ordain him. Mr. Hecht himself was not present, and only a few members of the Ministerium know him; therefore answer was made to the congregations that their request could not be granted." (Minutes, p. 200.) In 1786, the Ministerium appointed a committee to examine Hecht and, if found satisfactory, to license him. In 1787, several letters were laid before the Ministerium, asking for the ordination of Hecht, but the Ministerium replied that they could not ordain him now. (Minutes, p. 215.) To Hecht are probably due a number of irregular baptisms that are found in the record between 1784 and 1788. He probably retired in the latter year, as there is another break in the baptismal entries.

IX. PASTORATE OF G. J. WICHTERMAN, JUNE TO OCTOBER, 1791

On June 20, 1791, "two delegates from the Township Bedminster, in Bucks County, asked in the name of the congregation for MR. WICHTERMAN as the pastor, whereupon it was

"Resolved, That Mr. Wichterman write a brief exposition on John 3: 16, and that afterwards he be more fully examined on this passage and his exposition." (Minutes, p. 238.) After the exposition handed in by Wichterman had been read and he had been further examined, the Ministerium "found that it might well venture to give said Wichterman a license for one year." In Keller's record the entries of Wichterman begin on June 26, 1791. He entered four baptisms between that date and October 9, 1791. On October 9, 1791, the following entry was made by Wichterman on page 12 of the record:

"A meeting of the consistory was held, at which Michael Dieterle was elected elder in place of Mr. Muth, and Frederick Konig in place of Christian Stein, as deacon, by majority of votes.

G. J. Wichtermann, Licentiate."

In 1792, the Ministerium received letters "from his former and his present congregations, both speaking well of him. In the latter his ordination was requested. Resolved, that his

license be renewed." (Minutes, p. 245.) In 1793, Wichterman is reported as serving the Allentown congregation. At Keller's his presence can be traced from June to October, 1791.

X. PASTORATE OF ANTHONY HECHT, FEBRUARY, 1792, TO OCTOBER, 1794

In 1792, their former schoolmaster and preacher, ANTHONY HECHT, reappears in the church record. During the intervening years he had been ordained by an independent Lutheran minister and as a result he had to function independently of the Ministerium. His successor has left us a rather sarcastic but picturesque description of Mr. Hecht. He writes: "My predecessor was not what one would call a learned theologian. He wanted to become a tobacco-raiser. Dr. Helmuth related to me that he could not get him to learn the five [Latin] declensions nor the Greek alphabet. He answered him that he could not get any edification out of them. The Ministerium did not receive him, but he was ordained by one of the ministers in the backwoods. Yesterday I was requested to show a little more energy in the pulpit. My predecessor, they said, had hammered the pulpit most frightfully and had shouted murderously, all of which the people liked very much." (H. N., I, p. 269.) Hecht officiated as pastor at Keller's church from February, 1792, to October, 1794, during which time he entered thirty-three baptisms. As his name appears several times in the communicant lists of the year 1793, we are able to identify his chirography, which in turn helps us to fix the length of his pastorate. Hecht died while pastor of the congregation and was buried in the graveyard adjoining the church. The German inscription on his tombstone may be rendered as follows in English:

"Here rest the bones of

ANTHONY HECHT

fallen asleep in faith

late Evangelical Lutheran pastor here,

who died December 29, 1794.

His age was 31 years, 3 months and 23 days.

His parents were Anthony Hecht and Sophia Hecht."

XI. PASTORATE OF REV. AUGUST HENRY SCHMIDT, AUGUST, 1795, TO AUGUST, 1798

A new minister appears upon the scene at Keller's church in 1795. It was the REV. AUGUST HENRY SCHMIDT. He heads his baptisms with the statement: "List of children baptized by me, August Henry Schmidt, pro tempore pastor." From August, 1795, to August, 1798, he entered 74 baptisms.

On May 24, 1796, the minutes of the Ministerium state (p. 286) that "a certificate of ordination and several testimonials of August Henry Schmidt, a Lutheran preacher from Germany, were read." He requested to be received into the Ministerium. In reply it was resolved to recognize him as an ordained preacher, but it was declared that they could not receive him as a member of the Ministerium, "before it becomes evident that his conduct agrees with his testimonials from abroad."

August H. Schmidt arrived at Philadelphia with his wife and two children on July 7, 1795, on board of the ship Concord. On his arrival he was kindly received by the Rev. Dr. Helmuth, who gave him a letter of recommendation to the congregation of Tohickon (Keller's) and Springfield. Schmidt gives a vivid description of conditions then prevailing in his congregations, in a historical magazine, published in Germany. He states, that he was promised in his call a salary of sixty pounds, together with the use of the parsonage, located about forty-five minutes' walk from the Tohickon (Keller's) church. He was also promised the necessary fire wood, a meadow for three cows, a horse, and one Spanish dollar for every catechumen confirmed, as well as for every wedding and funeral the same amount. There were about 130 families in his two congregations. "My two churches," he writes, "are really very pretty, the one at Tohickon has even an organ. I like the order of worship." (H. N., I, p. 269.)

This statement of Schmidt regarding the organ is confirmed by the church record, in which we find on page 360 a long list of 161 subscribers to an organ fund, headed as follows: "We the subscribers promise to pay on or before October 12, 1792, for the organ, which is to be erected in Bedminster church, the following sums in gold or silver, Pennsylvania currency." A note at the end of the list states that "all the above sums have been paid in full by the several persons who subscribed in behalf of

the organ in Solomon's church, in Bedminster township." This is the first time that the name "Solomon's church" appears in the record.

During the ministry of Schmidt, Henry Lohr appears as schoolmaster of the congregation (Record, p. 285). In 1798, Schmidt removed to Easton, where he ministered for a number of years, but the Ministerium refused to admit him as a member, even after repeated requests. (Minutes, p. 329.)

XII. PASTORATE OF FREDERICK SANNO, MAY, 1801, TO APRIL, 1803

After the removal of Schmidt, the congregation was vacant for several years. In 1801, a new pastor appeared, namely, FREDERICK SANNO. On June 15, 1802, an application was made by "Friedrich Sanno," from Keller's, Tinicum and Springfield, to the Ministerium for examination, whereupon, with two other candidates, he was examined and licensed as a catechist, and was placed under the supervision of Rev. Mr. Schafer. In June, 1803, Frederick Sanno, from Bedminster, was present at the Synod at Baltimore. He reported for that year 63 baptized, 38 communed, 39 deceased and one school. At the same meeting a call came from the congregation at Carlisle for Sanno. He was allowed to accept the call.

Judging from his handwriting at Keller's, Sanno ministered there at least from May, 1801. There are two earlier baptisms, entered by his hand, but it is likely that he entered them upon his arrival in 1801. He officiated at Keller's from May, 1801, to April, 1803, during which time he entered fourteen baptisms, which shows that he was rather careless in entering his pastoral activities, as there ought to be 63 baptismal entries for 1802 alone, according to his report to Synod.

With Sanno's ministry Keller's church passed again under the control of the Lutheran Synod and the period of independent ministers was definitely at an end. The record of the later pastors, beginning with John Nicholas Mensch, 1804-1823, is well known. Hence we can bring our sketch of the early history of Keller's church to a close. Having followed the guidance of the early church record of the congregation, supplemented by the Hallesche Nachrichten and the minutes of the Ministerium, we

have, I believe, successfully reconstructed the early pastorates of the congregation and with that accomplished our task is done.

The summary of our findings is as follows:

About 1744, origin of the congregation.

1744-1750, visits of Muhlenberg and others.

1750, two delegates from Tohecka at the meeting of the Ministerium.

PASTORATES

1. 1751, July to 1753, August, Lucas Rauss.
2. 1754, October to 1758, August, John Henry Schaum.
3. 1758, September to 1760, October, William Kurtz.
4. 1761, February to November, Conrad Daniel Walther.
5. 1762, April to 1764, April, Otto Haase.
6. 1766, August to 1770, July, John Michael Enderlein.
7. 1774, May to 1783, December, Peter Frederick Niemeyer.
8. 1784 to 1788, Anthony Hecht, catechist.
9. 1791, June to October, G. F. Wichtermann.
10. 1792, February to 1794, October, Anthony Hecht, pastor.
11. 1795, August, to 1798, August, August Henry Schmidt.
12. 1801, May to 1803, April, Frederick Sanno.
13. 1804, August to 1823, May, John Nicholas Mensch.

The Ancestry of John Stover Fretz

By MRS. JOHN STOVER FRETZ, DOYLESTOWN, PA.

(Doylestown Meeting, May 2, 1931)

I HAVE been asked to prepare a paper on the History of the Fretz Family. A complete account of all of the branches of which is far beyond the limits of my allotted time. I have, therefore, limited my paper to my husband's direct line.

Naturally enough, in the history of a family, three pertinent questions arise: Where did the family primarily come from? Why did they come? Where did they settle?

To understand the situation, it is necessary to realize that they were, primarily, religious enthusiasts, who were willing to give up everything earthly for the sake of their religious freedom and beliefs. They were German Mennonites.

The family originated in the Rhine Palatinate in Germany, where they, evidently, had lived for many years. They were a thrifty, successful, peace-loving group and, above all else, desired that they should do right in the sight of God and man. The Palatinate, at that time, consisted of a number of small princely holdings, which were governed by over-lords, much the same as the feudal system in England.

It was about the time that the religion of Martin Luther had stirred the world, and a Friesian priest, who renounced his church, whose name was Menno Simon, who founded the sect of the Mennonites. The leading features of their belief was their refusal to take oaths, and their doctrine of infant baptism. For these doctrines, persecutions followed, and matters went from bad to worse, until the devout believers were no longer allowed to bury their dead in consecrated ground. In many respects, this sect resembles the Society of the Friends, which was a corresponding religious movement in England originated by John Fox. It was because of their similar faith, and the fact that William Penn had offered an asylum for all such persecuted, that the great migrations to America began. There were two or three such departures from the homeland for the new country. When one realizes that everything was given up, their friends, their homes and possessions, all that was dear to them and for which they had

lived, that they might go to a strange land infested with savage Indians and wild beasts, over seas in none too safe sailing vessels, all for the sake of their religious and conscientious beliefs, makes one surprised at their faithfulness to their creeds. Very few today would give up their homes for any religious faith.

We are, particularly, interested in three brothers, Christian, John, and Mark. These were the original pioneers. (Mark died on the voyage over.) They landed in Philadelphia in 1725. In the tax-lists, muster-rolls, etc., the name is spelled variously, as Fretts, Frets, Fritz, Fresh, due to the fact that the family being German, could not spell in English, and the rolls were kept by English people, who could not spell in German; hence, the phonetic manner of spelling. The correct spelling, as it appears in the German records, is von Fritsch and is, probably, a patronymic meaning, "son of clearness." The family coat-of-arms has been definitely traced by Julius F. Sache, Litt. D., formerly curator and librarian of the Masonic Temple in Philadelphia and for many years treasurer and one of the chief historical authorities of the Pennsylvania German Society.

The original pioneer of my husband's family was John Fretz. He was a weaver by trade and settled for a time in Upper Salford Township, now Montgomery County, where he married Barbara Meyer. In 1737, he bought 300 acres of land in Bedminster Township, Bucks County, where he was one of a committee to form the new Township of Bedminster in 1742. He was an important man in his day.

He and his wife were Mennonites and were members of the Deep Run Mennonite Church and are buried in that graveyard. He died in February, 1772. His will was written January 29, 1772, and probated March 3, 1772, recorded in Bucks County Will Book.

John and Barbara (Meyer) Fretz had five children, the third being Christian Fretz.

Christian Fretz was born in Upper Salford Township, then in Bucks County, May, 1734.

During the Revolutionary War, he was a private in the Bedminster Township Company, Third Battalion, Bucks County, Pennsylvania Militia, under Captain William McHenry, 1777-1779. The Bedminster Company were "Associators."

In 1757, he married Barbara Oberholtzer. He died May 1,

1803, and is buried in the Bedminster Mennonite Burying Ground.

Christian and Barbara (Oberholtzer) Fretz had twelve children, the first being John Fretz.

John Fretz was born in Bedminster Township, Bucks County, Pennsylvania, May 24, 1758. He purchased land adjoining the homestead in Bedminster Township and lived there until 1792, when he purchased 300 acres of the Rodman tract in Warwick (now Doylestown) Township and settled there, building the stone house, which was torn down in 1898. He purchased considerable land, owning, at one time, 800 acres along both sides of the Neshaminy, marked on old maps of that region as "Fretz Valley," by which name it is still known.

He was a private in the Bedminster Company, Bucks County Militia, in Captain William McHenry's Company, 1782.

He married Ann Kratz. He died on December 20, 1804, and is buried in the Doylestown Cemetery.

John and Ann (Kratz) Fretz had nine children, the first being Christian Fretz.

Christian Fretz was born in Bedminster Township, November 17, 1782, and lived there until he was ten years old, when his father moved to Warwick Township, where Christian lived all of his life. He was a successful business man and owned a great deal of real estate in that township. He established the Fretz Valley Inn, near the old homestead on the Philadelphia Road, which he conducted for a number of years, dying there on January 28, 1840.

He married on April 14, 1808, Mary Stover, and they had five children, the third being Philip Kratz Fretz.

Philip Kratz Fretz was born at the "Fretz Valley Inn," in Warwick Township, September 14, 1813.

He succeeded his father as owner of the "Inn," which he conducted for a short time, until January 9, 1846. He was extensively engaged in contract work in partnership with his brother-in-law, John Farren, and was one of the contractors who built the Horse Shoe Curve for the Pennsylvania Railroad over the Allegheny Mountain, and, also, built the stone bridge at Bridge Point. He was president of the Democrat Club of Pennsylvania before the Civil War. He was married at Point Pleasant, Pennsylvania, on February 18, 1841, to Anna Stover, by Rev. Silas

Milton Andrews. In February, 1861, he and his wife joined the Doylestown Presbyterian Church. He died on March 13, 1867, on board the steamship, "Henry Chauncy," off the coast of the Carolinas, while on his way to California to visit his brother. He was buried at sea.

Philip Kratz Fretz and Anna (Stover) Fretz had four children, the fourth being John Stover Fretz, the special subject of this paper.

Ralph Stover Fretz, brother of Philip Kratz Fretz, was born in Warwick, November 1, 1809, died in California, June 6, 1867. He had an eventful career. Early in life, he engaged in business in Philadelphia and, later, came to New York City. At the latter place, he met Commodore Garrison and became interested with him in several important enterprises. For some years, he ran a line of steamboats on the Mississippi River and, later, engaged in trading and shipping enterprise with Commodore Garrison at the Isthmus of Panama, in which he was joined by his brothers, John and Christian Augustus. In 1849, he sailed from the Isthmus to San Francisco, where, in connection with the Commodore, he established a bank. The eighth clause of his will reads as follows:

"Eighth: Considering that I have been greatly blessed and that I have an undying attachment to the Government of the United States, the country of my birth, and remembering that by reason of my age and infirmities during the recent unnatural rebellion to destroy it, I was unable to render service in the field to put down and punish that great crime, and being not unmindful that a huge public burden of indebtedness has been necessarily incurred in accomplishing that object, I desire not only to leave behind me when I am gone an humble testimonial of the gratitude I feel towards those whose virtues, valor and sacrifice and services preserved what I regard as the best government that men was ever permitted to have, but beyond that and in addition to paying the ordinary taxes on my estate, I think it my duty out of the means Providence in His bounty has enabled me to acquire, and the Laws of the Country has aided me to preserve, to do something towards extinguishing the National Debt: Therefore moved thereto by the foregoing causes only, I hereby give and bequeath unto the Secretary of the Treasury of the United States of America, in trust and to be applied only towards cancelling the National Debt, the sum of Twenty Thousand Dollars."

John Stover Fretz was born in the old Fretz Valley homestead in Doylestown Township, September 22, 1850. He was but seventeen years of age at the death of his father, and resided for some years with his brother, Philip Henry Fretz. In 1879,

he purchased of his brother, his residence. He soon after erected and equipped a large steam saw mill near his residence, which was operated for many years. He was a member of the Doylestown Presbyterian Church and took an active interest in all charitable work. He was the owner of the old Fretz homestead that had been the home of his ancestors for over a century. He married, in October, 1880, Mary W. Long, daughter of Henry Long, of Doylestown. They had one son, Augustus Henry Fretz.

Augustus Henry Fretz was born in 1882. He graduated from Lafayette College in 1903. His first position was rodman for the Lehigh Valley Railroad. Later, he was draftsman in the office of the Bridge Engineer of the Delaware, Lackawanna & Western Railroad. In 1911, he became instructor in the Geological Department of Lafayette College, and in 1918 took his present position as Assistant Professor in the Geological Department at Lehigh University.

He married Miss Adele Steele, daughter of the Honorable Henry J. Steele, a leading lawyer, of Easton, and a former member of Congress from Northampton County.

In a somewhat lighter vein, there are, as with all families, a number of anecdotes, which cannot be proven, but which are handed down from generation to generation. Some of these may be interesting: It was recorded that Christian Fretz, the first, owned a very fine horse. The Indians wanted that horse, but Christian would not sell the animal, so they came at night and stole it. Christian visited the Indian camp the following evening and, when all was quiet in the wigwams, he secured his horse and rode home. A horse in those days meant a great deal, and this was reputed to have been a very valuable animal.

One of Christian's sons, also, owned a fine horse. A foraging group of Washington's army, while they were encamped near Newtown, Pennsylvania, came to the Fretz farm for hay, and the commanding officer saw the horse and determined to take him. This was against the will of the owner, who rode the horse up to Haycock Mountain, fording streams to cover his tracks, although being followed by the officer. The horse was hidden, and the officer returned. Then the boy went to the encampment and laid the matter before the general in command, who gave him a written order that he should retain his horse. Thus did he win his point.

Another story is told of one of the early members of this family, who owned some fine cows. One day a man rode up and wanted to buy one of them. The owner did not wish to sell, but the buyer did not give up and insisted that a price be set. This price was made double what the cow was worth to discourage the man, but, nothing daunted, the buyer laid down the money and drove the cow away. Later on, the former owner talked the matter over with his wife, and they decided it was "usury" to keep the money, which, to their simple Mennonite faith, was a sin; so he saddled a horse and rode after the man and gave half the purchase money back to him saying, "I don't want to have my soul damned for a cow."

Another John Fretz, a grandson of "Weaver John," bought three hundred acres of land in Warwick Township, thus establishing another Fretz homestead in Bucks County. He paid for this tract of land, as he said, "with gold and silver." After that remark, he was always known by the name of "gold and silver."

These anecdotes might be multiplied, as like stories could be in all family histories, but they are simply hearsay and more or less entertaining, without any real facts to make them of value.

The outstanding work, which the family did, was the establishment of a vigorous, honorable, strong race of God-fearing, devoted religious people, who gave their all for the tenets of their beliefs.

The one act, which stands out, particularly, is the building of the old Mennonite log church at Deep Run, Bucks County, which was erected in 1746. This was a great solace to the family, and they were largely instrumental in having that place of worship later rebuilt with a stone edifice erected in 1766, which stood for over a century.

When one realizes that almost the whole section of country pioneered by this family and many others is gradually falling into the hands of a race of Italians, Hungarians, Lithuanians, and Slavs, who are owning the farms and taking the places of those who cut down forests and tilled the fields, it is timely to think back of the sacrifices made and the beginning of the country established on a religious basis. Even the boys in our colleges and universities are largely of foreign extractions, as is shown by their names. The older generation, who built the

nation, fought for its independence, and established its everlasting career, is fast disappearing.

The real function and reason for historical societies is to keep alive the names and works of those who sacrificed and erected our Commonwealth, and it should be our pleasant duty to ever keep fresh and green the memory of our ancestors. Like Robert Paterson, in Sir Walter Scott's well-known "Old Mortality," we ought to keep the memory of those gone by.



MENNONITE MEETINGHOUSE, DEEP RUN

Bedminster Township, Bucks County, Pa. Erected in 1872. Successor of stone meeting-house of 1766, enlarged in 1795. Meetings for worship were first held in log school-house of 1746.

North Doylestown Borough and Adjacent Townships

By MRS. C. D. FRETZ (NEE ANNIE MEREDITH), OAK LANE, PHILADELPHIA

(Doylestown, Pa., Meeting, May 2, 1931)

EMERSON wrote, "There is no history except biography," and in order to know what happened we must see how and where people have lived.

A mile north of Doylestown, the county-seat of Bucks County, on the Easton road, was an old tavern, still standing, called the "Cross Keys." After the death of the owner, Tobias Weisel, it was for some years conducted by members of his family. A Miss Hopper, of Philadelphia, was placed there by her brother to board, considering it healthy and a quiet place for her to live. He reckoned without his host for she would not be a shut-in, and being fond of reading she walked to the Doylestown Library for books. She was exceedingly stout and alternately took a few steps and then rested. She frequently stopped at houses for something to eat and drink. She had her favorites among the neighbors. Mrs. William Steckel, a kindly woman, was one of them. Mrs. Steckel had four daughters. Emma, the oldest, was a pupil at the Ingham Seminary (Mrs. Taylor's School) and played beautifully on the piano. During the Civil War the children of the neighborhood met at Steckel's to pick lint for the soldiers.

Miss Hopper was a great responsibility to her friends who feared for her safety, especially after dark. The hostler at the hotel, thinking to cure her, donned a sheet, and came before her with outstretched arms. She bravely pulled it off and was only mildly amused.

Tommy Trowers and his wife, Madeline, lived at Leatherman's, across the way. He was a peddler, and amassed quite a fortune for those days. People were horrified when they learned that he went into the garret and hung himself. He is buried in the Mennonite Graveyard on Dutch Lane.

The crossroads at the Tavern are of interest, as the one to the left was used by the boys as a way to the old swimming pool; nearby was the farm of Mr. Haney, who had seven sons. Two of them were, successively, teachers of the Sandy Ridge school.

Ezra taught the names of the states and their capitals, by chanting them, e. g., "Maine, Augusta," and he taught spelling by organizing spelling bees and "choosing sides." He later became a Presbyterian minister and had a charge near Pittsburgh. Abraham, the other brother, was also a very enthusiastic teacher; he wrote in my grammar "*Perseverentia Omnia vincit.*" The road to the east was the dividing line between Buckingham and Doylestown townships. The toll-house was on the side of the latter. Old residents remember how the toll-gatherer closed and opened the gates at certain hours at night, if he heard a call. He had a tin box on the end of a long handle to reach out to collect the tolls. The Intelligencer was left there to be called for by the subscribers.

In the house later occupied by Mrs. Jacob Knight lived a family whose little girl was run over and killed by a wagon. A few years later, Willie Rapp, a young boy living with his grandmother, burned a large stack in Fretz Weisel's field. He was punished by being sent away to an institution.

One of the accustomed sights was seeing Neddie Brannen breaking stones on the pike, as the road was called. He used a long-handled hammer to break the stones to the required size. When asked on a hot summer day why he wore a red flannel shirt, he replied, "to keep the heat out," and when a child was going for Dr. McCoy because her baby sister had a box of matches and was tasting them, he said, "They are made of sulphur and will be good for her."

The tree at Mercer's Corner and Dublin Road, had wide spreading branches that sheltered many a tramp on his way to Easton or Philadelphia. Frightened children coming home from Sandy Ridge School in order to avoid the tramps, would run back, climb fences and cut across the fields. In due time a good thing was accomplished when a board walk was built from the pavement of the town, extending nearly to the Cross Keys. Simon Meredith bought ten acres of land across the road from his brother Aaron and erected beautiful buildings. From this home his daughter, Margaret, was married to Dr. Andrew J. Yerkes. They were the parents of Edwin M. Yerkes and Carrie Yerkes Voorhis. After living there a few years he sold the place to John D. Smith; whose wife said, seventy years ago, "disease was caused by germs." She read this in the newspaper *Die*

Morgenstein, published by Moritz Loeb at the brick house where the Happs and Dr. J. N. Rich now have their offices. He and his son Isaac were buried from there and two daughters, Flora and Carrie, married there.

In an old-fashioned house at the bend of the road opposite lived the Clarks. When Sheriff Albert Philips' term of office expired he had the old house demolished and the new house built. In a few years history repeated itself and a new one stood on the same place, called "Aldie," the home of the Mercers. That house was demolished in 1927 and a new one built in a more desirable location. The grounds retain many of the old trees and shrubs; with landscape gardening has become a place of beauty.

In great contrast from point of age is the adjoining property. It was the original tract including land of several hundred acres. George Fitzwater bought two tracts containing six hundred and ninety acres in 1737. In 1751 he died and his Executor sold the tract to Joseph Richardson. Thomas Good bought one tract in 1748 of 154 acres, and made improvements. Just where and what they were the writer is not informed. He was a Quaker from England and married Mary Jardell, of Abington, also a Quaker. He had joined Buckingham Friends Meeting when a young man. Becoming old by 1762 he conveyed to his son, Thomas Good, Jr., 128 acres. He was the owner during the Revolutionary period, and down to 1794. In 1776 the assessor credited him with 198 acres and called him a Quaker; his name was among the Non-Associators who did not join the Military Company. He sold 77 acres to Asher Foulke. In 1796 he sold his 74 acres to Michael Delp. In 1804 the property was again divided. Thirty-eight acres and house were sold to Edward and Jonathan Rice. In 1834 it was bought by Thomas Wombold and he sold it to my father, Aaron Meredith, in 1852. When Mr. and Mrs. Meredith came to see the place they were surprised to hear Mrs. Wombold complain about her husband "never fixing anything." The Wombold's took boarders and the family had to sleep in the room above the carriage house. Great credit is due Mrs. Wombold for her beautiful flowers; roses, lilies, peonies, Easter flowers, white and lavender lilacs, wistaria, sweet-scented shrubs, coral honeysuckle, rose of Sharon, and all the flowers we now call old-fashioned. There was a border of currant bushes,

red and yellow raspberries and blackberries along the fence, and a grape arbor in the center, also a large box bush. In the front yard were two large cedar trees, an arbor vitae, pine, linden, plum, cherry, peach and pear trees; in the back yard, a very large walnut tree and the property also had a fine apple orchard.

Two prominent men were distinguished guests in that house during the Civil War when Major George K. Scholl, of Perry County, Penna., visited his sister and her family. He had been a soldier during the Mexican and Civil Wars. He was a tall, thin, erect man. He escaped without a wound and lived to a good old age. The other man was Dr. Simon Meredith, of Mount Joy, Pa. His birthplace, also his father's, was at the home where his grandfather, James Meredith, settled, now called Pine Tree Farm.

It is thought that the Aaron Meredith house was built before the Revolution. It had an old kitchen with a wide fireplace, andirons, pot hooks, and an old time bake oven; a pretty floor with a mosaic effect of stones and shining plaster was there until the late sixties, when Aaron Meredith built a two-story addition, remodeled the front of the house with large windows, removing the fireplace to make room for another window, ceiling the garret and dividing it into rooms. Two old boxbushes growing close by the house were cut down and removed to the woodshed, to make room to build the porch. A low, whitewashed fence was built on a stone wall and a brick walk from the gate to the front door, which had a lattice-work arbor, over which drooped wistaria flowers reminding one of bunches of grapes.

After Mr. Meredith's death it was bought by Henry W. Gross in 1880 and is still in his family. Mr. Gross built an addition on the north side to provide a home for his mother.

On the opposite side of the Easton and Dublin Roads was land belonging to Judge Henry Chapman. It reached to or near the borough; along the road is a beautiful row of maple trees, and on the Dublin side is a fine old woods, bordering on the Sandy Ridge and Dutch Lane Roads. On retiring from the judgeship, he sold his home to Oliver P. James, M. D., and built another house on a desirable location. The place was called "Willowmere." He died there April 11, 1891, in his eighty-eighth year and his funeral was one of the largest that ever took place at the Presbyterian Graveyard. His wife, Nancy, a daugh-

ter of Governor Shunk, of Pennsylvania, and their daughter, Miss Fanny Chapman, have both passed away. Now the property is in the hands of strangers. In the late eighties it was a familiar sight seeing him riding in his carriage, as the poet wrote, "viewing the landscape o'er." It would have been interesting to have known his thoughts; he would visualize his parents on the streets, entering their home, corner of Main Street and Dutch Lane, then his mother's father, Dr. Hugh Meredith, who was building a house for his son, Dr. Charles; later he would see Dr. G. R. McCoy, who spent the greater part of his professional life and died there. He would have heard the trouble they had to get money to build the Academy, the planning of the different houses, a vacant chair in every house. His sister, Wilhelmina, married Mathias Morris, a man of the same profession. She did not resemble her brother, as she had a full, round face and was short and stout. The writer remembers seeing her sitting in the bay window. She had several namesakes. Her daughter married John Lyman. He made improvements to the old house and thereafter it was known as the Lyman home. They have descendants.

The house on the opposite corner was built for a tavern and called the Green Tree. A man hung himself in the barn connected with the hotel. Later Theodore Kinsey lived there. He achieved success in the lightning rod business. His daughter, Carrie, and Fanny Chapman were playmates and attended a school at the last house on Mechanic Street.

Broad Street was opened in 1811. The first house to be built there was occupied by Captain James Carver of the Civil War; then Judge Richard Watson and James Lambert, and since then has been in the Fackenthall family for three generations. Opposite was the jail with its high stone wall; on the front yard of the Presbyterian Manse was the Ingham Seminary. The field was farmed by a lawyer and author, Caleb E. Wright, who lived in the old Fox house. The Judge John Fox law office, being in a desirable location, was occupied as an office by Alfred Fackenthall, Esq., until it was removed to build the Doylestown Trust Company. Mr. Fackenthall was one of the prominent men of the Republican party. In 1884, he served as a Presidential elector, and for some years was chairman of the County Republican Committee. He was also greatly interested in the Order of

Odd Fellows, having passed the chairs of the Grand Encampment of the State.

Miss Agnes Brunner was six years old when her parents moved to their lovely colonial house on Mechanic Street. She remembers a minister, the Rev. Alexander Vaughn, sitting in the yard at the corner. "I thought him a very smart man as he was always reading." In Davis' "Doylestown Old and New" he wrote, "The seed from which the Reformed Church grew was planted by a minister, Rev. A. Vaughn, of this denomination who had a classical school here in 1858. He preached occasionally in the Methodist Church."

Passing by the old houses on Mechanic Street, we go down the hill, Church Street, and see the Clear Spring hotel. It has a never failing spring of water. A one-time owner gave it to the town. A man was killed there one windy day when a trap door blew down on him while walking between the hotel and the barn.

Across the street was the "oldest house," a log house in which lived Casper Rhodes (Rhot) and his family; it was removed to the Historical Society grounds. He is remembered as pasturing his cow along the sides of the road, while his wife worked by the day for the Chapmans, Dr. James, Baker Hahls, and the Merediths. Her wages were fifty cents a day; she went to Florida to visit a son, where she died, and is buried there.

The Presbyterian Church is the second one to be built. It is on the corner of Mechanic, Church and East Court Streets. Rev. Silas M. Andrews was a much loved minister who had preached there fifty years. He was the Superintendent of the Sunday school, which was held in a frame building at Court and Church Streets, near the corner of the graveyard. He talked in an impressive way. One day to show how soon life could end, he gave an example of a girl dying, simply by cutting her finger in breaking a thread. Another time he wished to have the number of Bible verses recited to teachers. His method was first for those who had recited five to stand up, then those of ten to stand up. One time the only one who had ten was a little girl; he called her name and said "why can you not do as well as she did?"

The Sunday School held in the afternoon was called the Infant School, taught by Mrs. Chapman and Mrs. Taylor. These kind ladies gave up their afternoon rest to teach little

children things never to be forgotten. A chart was on the wall, containing the letters of the alphabet, each one with a Scriptural line. "A is for Adam who was the first man," etc.

One time Mrs. Chapman took a little girl on her lap fondling her saying, "The little country children coming so far this hot day." We learned a great many hymns: "Little drops of water, little grains of sand," "The morning bright with rosy light," "There is a happy land, far, far away," "Like mists on the mountains, like ships on the sea," and others.

We recited verses on the blue tickets; when having a certain number we received red ones. We learned the commandments. One time Mrs. Chapman saw a boy picking cherries and explained how wrong it was breaking the Sabbath day.

The rich and poor, the educated and illiterate, have left their imprint on the town, and the transmission of mental characteristics is very apparent.

No history of Doylestown would be complete without an account of the first settler, James Meredith, born in Wales, descended from Owen Glyndwr, the prince of Powys. He came to America in 1708, and served as a Lieutenant during the Colonial and Indian Wars. In his will, made in 1774, he bequeathed land for a schoolhouse where children of the neighborhood could be educated. He divided his land between his sons, Simon and Thomas, and gave his son, Hugh, who was lame, a medical education. Hugh was the first physician of the town and surrounding country and prominent in its affairs. He gave land for a Potters' Field, where the bodies of persons of every color and condition of life might be interred.* His name is among the signers for the removal of the County Seat from Newtown to Doylestown in 1784. He established a library. Several houses built by him still show good material and workmanship. The most attractive one of these was for his son, Charles, later belonging to Dr. Gilbert Rodman McCoy, and after his death, it became the property of his granddaughter, Miriam Watson,

* The Union Academy erected in 1804, was partly built by subscription and partly by lottery, \$6,000 being raised by the latter means. Hugh Meredith was one of the commissioners. The lot on which it was built at the southeast corner of Court and Broad Streets was the gift of John Hough, of Warwick Township, and the deed was executed, September, 1804, to Charles Meredith, of New Britain. (From Davis' Doylestown Old and New, page 49.)

daughter of Judge Richard Watson, who had married Henry A. James, Esq.

The family believed in a Higher Power, controlling the destinies of man, as their old Welsh coat-of-arms testifies. Translated it means, "Without God Nothing, With God Everything."

When in Wales, they heard the command, like men of Bible times, leave the place of thy birth, cross the ocean, conquer opposing forces, and I will give thee, the land for thy inheritance. It has been fulfilled—by the survival of the fittest.

An uncle of James Meredith, living in New Jersey, had an invalid son, and he made a proposition that the land he owned along the Neshaminy, should belong to James if he would go there and care for his son. When the son died, James bought the land at sheriff's sale which had been intended as a gift for the care of his cousin. Many generations of these three sons are living. Four descendants met at Fonthill a short time before the passing of Dr. Henry Chapman Mercer. Two of the sons of Simon, one of Thomas, and Dr. Hugh. His last words to them, "What have they done worthwhile?" The answer to that question is to study the lives of those gone before. The old homestead of this ancestral land was the birthplace of three generations who were valuable members of society.

Great changes have taken place since those early days—the Revolution, the Civil War, the Spanish-American War and the World War.

Mary, the wife of James Meredith, rode on horseback to the Episcopal Church in Philadelphia of which she was a member. Now, her granddaughter of the fifth generation, in her motor car can pass over the same road in less than an hour, or hear the church services in her own home over the radio.

Sixty years ago people laughed over Mother Shipton's prophecy, "Carriages without horses shall go." How true it is that the principle of continuity runs through the life history of this family, a summation of what they have thought and done has reached a climax like plants of long growth coming into flower and fruit.

Dr. Hugh Meredith's daughter, Elizabeth, married Abraham Chapman. They were the parents of Judge Henry Chapman, who in 1844 built the house, now the summer home of Miss

Sarah James. Almost opposite in the north corner of the Court House Park is the beautiful and artistic Memorial Fountain, designed by his grandson, Mr. William R. Mercer. It was chosen from five other designs, submitted by some of the leading sculptors and artists of the country. It occupies an appropriate location near the old home. The artist will remember his grandparents, parents, his brother, his aunts, Mrs. Bigelow Lawrence and Miss Fanny Chapman, his uncle, Arthur Chapman, and sister, Leila, who married Lieutenant Von Fiedler. She is not laid at rest in the nearby Presbyterian graveyard, but in far away Germany, with her husband and his people.

In early times the only burial places were the Presbyterian and Methodist church yards. A demand was made in 1840 for a public cemetery. Ten acres of land were bought. The first interment took place January 4, 1851, being the body of a Mr. Trueman. In 1870 a plot of ground adjoining and about the same size was added. East Court Street was known as Academy Lane. At the cross-roads was a beautiful white house, where the Silas Atkinson's lived, and when it was burned down every one was sorry, for the house and grounds were most attractive.

A short way to the east a street was opened called Maple Avenue. Several modern houses were built there, and a Seminary known as Linden Female Seminary was established, now the residence of Dr. Robert L. Walter. It was a boarding and day school. The principals were Rev. L. C. Sheip and Prof. Henry H. Hough, with a staff of competent teachers. The school was started in Masonic Hall in 1869 and proving a success, a lot was purchased, whereon a suitable building was erected and the pupils transferred in the spring of 1872. The school prospered for a few years. Mr. Sheip died February 17, 1897. He had been superintendent of the Doylestown Public Schools from 1879 to 1890. Mr. Hough was appointed to a position in the Pension Bureau, Washington, where he died in 1902. The artist, Thomas P. Otter, Harry Lloyd and Alfred Fackenthall had special classes in drawing, Latin and botany. One of the pupils finding an early spring flower, *Draba Verna*, analyzed it correctly, which was the beginning of her interest in that study. Later in life she was assistant and wife of the botanist who revised the catalogue of Wild Flowers of Bucks County for Davis' History.

Descending the hill we see Fonthill, the arboretum, the bird sanctuary and the little stone house which Dr. Mercer generously gave to Bucks County. The latter was once the home of Wilson Harding. He is remembered doing carpenter work for the neighbors. His by-word was "sure." He had at least two children, Miss Sue and Mrs. Hill.

In the early seventies, Mr. Aaron Meredith bought a beautiful level field below the hill; adjoining it was a picturesque spot, a pool from Cooks Run and swampy ground, where grew dog tooth violets, and spring beauties, and tall beech trees where visitors cut their initials. In the days of the Doylestown Democrat, Mr. John P. Rogers, a talented reporter, wrote an article about it. He married late in life and had a son, Roscoe, whom he was proud to take around in the baby carriage.

The Merediths had five daughters who were pupils of Linden Seminary, and a son, Hugh, who attended the English and Classical Seminary. He studied medicine and received his diploma from the University of Pennsylvania. For many years he was the head physician and superintendent of the Danville, Montour County, Pennsylvania, Hospital. He was a worthy successor of the old time doctor of the same name.

We have descended Harding's Hill and have come to the end of our historic walk—the Crossroads of the Easton and Dublin pikes. I am indebted to "Local History Sketches" by Edward Mathews for many of the dates and landowners contained in this paper.

Tamenend vs. Allummapees

By WARREN S. ELY, DOYLESTOWN, PA.

(Doylestown Meeting, May 2, 1931)

MOST of our older members will recall that forty years ago our society, and notably our late president, Dr. Henry C. Mercer, were much interested in the legend, founded on tradition, that St. Tammany, the great Indian sachem, was buried at Spruce Hill, four miles west of here, and that Dr. Mercer, having after careful investigation concluded that the tradition was true, decided to mark the burial place of the great friend of the white man.

His conclusions and the known facts upon which it was founded were the subject of a paper written by him and published in Volume II of "Papers Read before Bucks County Historical Society" at page 38, et seq.

Having practically convinced himself of the truth of the story, he decided to properly mark the site, and in pursuance of that intention purchased in the name of our society one acre of land surrounding the site. Your orator superintended the survey of the lot and prepared the deed of conveyance, which is recorded in the office of the Recorder of Deeds at Doylestown.

However, before the erection of the proposed marker was consummated doubts began to arise as to the identity of the Indian chief there interred. The facts related seem to incontrovertently prove that an eminent chieftain was buried there at about the date named.

This date was at that time thought to have been somewhere near 1749, by reason of the statement that Robert Shewell (son of William Shewell, of Painswick Hall, who was one of the chief men who participated at the burial), born 1740, was then a small boy, and was refused by his father permission to be present at the burial.

I will not repeat in this paper the details of the statements made by the surviving members of the Shewell family, and the statements of "E. M." (Edward Mathews), Sherman Day, and others who have published more or less garbled stories, at different periods, based thereon, as these are already part of our published archives.

Suffice it to say that a distinct doubt has always, or least frequently, been in the minds of our historians as to the identity of the Great Chief, so buried.

These doubts have always been shared by the author of this paper and he has always been on the alert for facts in the history of our Indian Chieftains, that might clear away these doubts.

Tamenend was succeeded as King of the Delaware tribe by Scallichty, who died in 1713, and was succeeded by Allummapees, also known as Sassoonon, who died in 1747.

Allummapees was long a popular and successful ruler of his tribe. He evidently did not have as strong an attachment for the Whites as the great Tamenend, who had known personally William Penn and was always a great friend of the white man, but he was for years a wise and successful leader of his tribe. The great curse of the Indian was his love of ardent spirits, and the leaders among them had long endeavored to restrain the Indian Traders from selling rum to their followers, and it was finally decided by the prominent Delawares that this practice could be better controlled by permitting its sale only to their chief.

Under this plan Allummapees, who was Keeper of the Wampum, was always abundantly supplied with firewater, and having the same love for it as his followers, in his later days became a confirmed drunkard.

Conrad Weiser, the great Indian interpreter, who was intrusted by the Provincial authorities with nearly all important conferences with the Indians, in a letter to Richard Peters, Secretary, under date of July 20, 1747, referring to the effort on the part of the Proprietors to have Allummapees to resign as King of the Delawares, says:

"Allummapees would have resigned his crown before now but that he had the keeping of the Wampum with which he buys liquor and has been drunk for this two or three years almost constantly and it is thought he would do so long as there is one penny of Wampum left in the bag."

In an earlier letter in June, 1747, to Anthony Palmer, who had succeeded James Logan as Provincial Secretary, and was succeeded in the same year by Richard Peters, Weiser writes as follows:

"The Delaware Indians last year intended a visit to Philadelphia, but were prevented by Allummapees' sickness, who is still alive but not able to stir. They will come down this year, some time after harvest.

"Allummapees had no successor of his relations and he will not hear of none so long as he is alive and none of the Indians care to meddle in the affair. Shikellimy advises that the Governor should name Allummapees' successor and set him up by their authority; that at this critical time might be a man to apply to, since Allummapees has lost his senses and is incapable of doing anything."

In another letter in September, 1747, he writes Peters that the Indians had at last prevailed upon Allummapees to go down to Philadelphia with them.

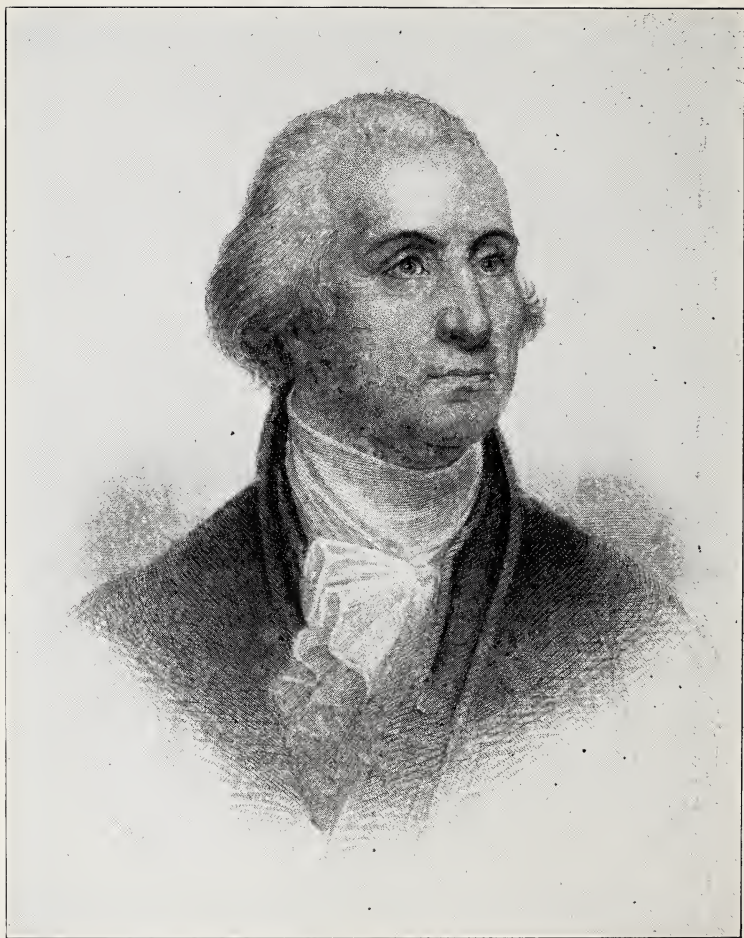
In October, 1747, Weiser writes to the Governor that "Allummapees is dead."

The only weakness in the theory that it was Allummapees was carried in a letter as far as Prospect Hill, and left there because of his condition being unfit to travel farther or appear before the Provincial authorities, is that there is no record of a delegation appearing before the authorities at that date. But being unaccompanied by any one in authority, they naturally would not have been received, and possibly knowing that they could not accomplish anything they may have turned back, hoping to find their chief sufficiently improved or sobered to continue the journey.

The circumstances and dates coincide so fully with the traditional story, that I am fully convinced that the chief so buried was Allummapees.

The recent investigation of Prof. Max Srabish, of Paterson, New Jersey, in what has been long known as "St. Tammany's Flats," in Wayne and Pike Counties, indicates that the last days of Saint Tammany were spent in that locality, and Srabish feels sure he has discovered the actual place of his burial.

The fact that the delegation of Indians who carried their chief over the usual route from the headquarters of the tribe to Philadelphia on a diplomatic mission in 1747, or anywhere near the date mentioned in the tradition, precludes all possibility of the chief having been Tamenend, who had no diplomatic authority at that date, and all the circumstances point to and fit in with the proposed trip in 1747, so perfectly that I am convinced it was Allummapees who was buried at Prospect Hill at that date.



George Washington

The Thompson-Neely House, Solebury Township, Bucks County, Pennsylvania

HEADQUARTERS OF BRIGADIER GENERAL WILLIAM ALEXANDER, (KNOWN AS LORD STIRLING,) DECEMBER, 1776, PRIOR TO THE BATTLE OF TRENTON

ADDRESS BY DR. B. F. FACKENTHAL, JR., RIEGELSVILLE, PENNSYLVANIA,

On occasion of the unveiling of a tablet placed on the Thompson-Neely House,
Monday, October 19, 1931, by

BUCKS COUNTY CHAPTER, DAUGHTERS OF THE AMERICAN REVOLUTION

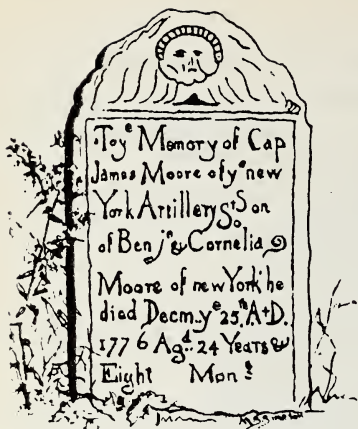
(The Bucks County Historical Society was the guest of the Daughters of the American Revolution, and this joint meeting was in lieu of the fall meeting of the Historical Society.)



CONSIDER it a great honor and a distinct pleasure to represent the Bucks County Historical Society at this unveiling, and I cannot too highly commend the patriotism of the Bucks County Chapter, Daughters of the American Revolution, in erecting this bronze tablet commemorating the deeds of valor and the sacrifices of our gallant and resolute forefathers.

This is indeed historic and hallowed ground. Prior to the battle of Trenton this building, now called the Thompson-Neely House, was the headquarters of Brigadier General William Alexander, known as Lord Stirling, one of Washington's most dependable generals.¹ On the staff of the Earl of Stirling was Captain William Augustus Washington, a kinsman of General Washington and later a member of his staff. Lieutenant James Monroe, later to become the fifth president of the United States, then in his nineteenth year and serving in a Virginia regiment, was conspicuous for his bravery at the battle of Trenton. In 1777 he was placed on the staff of Lord Stirling with the rank of major.² Captain Washington and Lieutenant Monroe were the only commissioned officers wounded in the battle of Trenton; they were brought from the field of battle to this house, where they were nursed back to convalescence. Two privates were also wounded in that engagement, one of them, Robert James Livingston, was cared for at the home of Miss Rebecca Coxe in Trenton, the other whose name is not at hand, was probably cared for at this Thompson-Neely house.

(For footnotes, see appendix.)



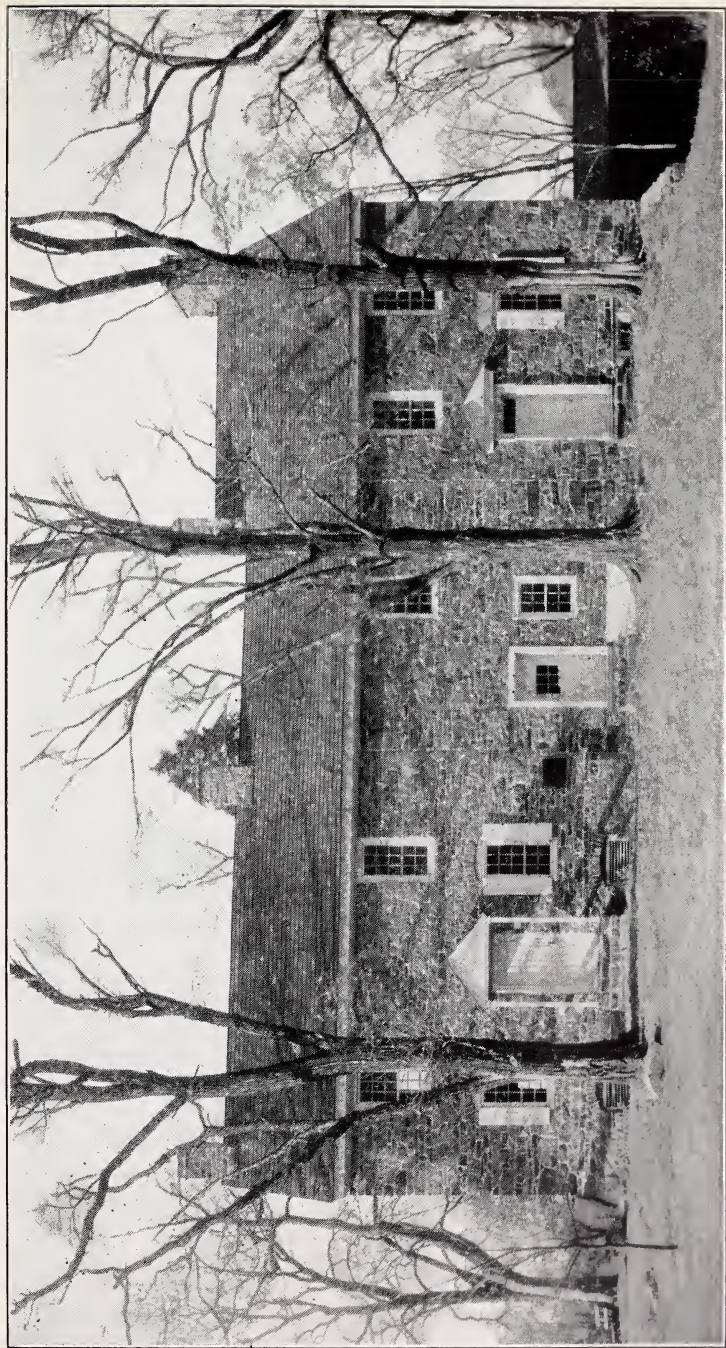
Captain James Moore, of the New York artillery, died here on Christmas day of 1776; his body lies buried, together with twenty others, heroes all of them, in the burying-ground along the banks of the beautiful Delaware, almost within sight of this house. A quaint headstone, with an inscription as shown on the margin hereof, has been erected to his memory, but the other graves are indicated only by field stones. In 1929, the

Washington Crossing Park Commission, on behalf of the Commonwealth of Pennsylvania, erected a substantial marker, consisting of a large boulder, set at an angle and facing the private road, with a bronze tablet, to the memory of the Unknown Soldiers, with the following inscription:

IN MEMORY OF
MANY UNKNOWN SOLDIERS *
OF THE
CONTINENTAL ARMY
WHO DIED FROM SICKNESS AND
EXPOSURE WHILE ENCAMPED IN
THESE FIELDS BEFORE THE
BATTLE OF TRENTON AND WERE
BURIED AT THIS SPOT
CHRISTMAS DAY. 1776

It is gratifying to notice that these graves are not forgotten on Memorial Day, as is indicated by the stars and stripes placed over them, the very emblem for which they gave their lives.

It is doubtless not known to many of you that in 1922, the State Highway Commission, in straightening out the River road, 1.8 miles below Washington Crossing, at a point where the road from Dolington enters the River road, unearthed a number of bodies, supposed to have been those of soldiers who lost their lives by exposure and otherwise at the battle of Trenton. Five of these bodies were carefully removed and placed in boxes, with the thought of having them interred elsewhere; in



THE THOMPSON-NEELY HOUSE

Headquarters of General William Alexander, known as Lord Stirling, prior to crossing the Delaware and the Battle of Trenton, Christmas Night of 1776
The central part of the house was built in 1702; the western section on the left built in 1757, and the eastern section on the right built in 1786

fact, one member of the commission, now deceased, offered at his own cost to give the matter attention, and also to erect a suitable marker over them, but through some neglect this was not done. I therefore take the liberty of inviting the attention of the present Washington Crossing Park Commission, the personnel of which has changed since then, to this condition, and trust that the original thought may be carried out. Why not bury them in that sacred place along the banks of the Delaware, by side of their comrades, who like them fell unwept and unknown, in the great cause of American liberty?

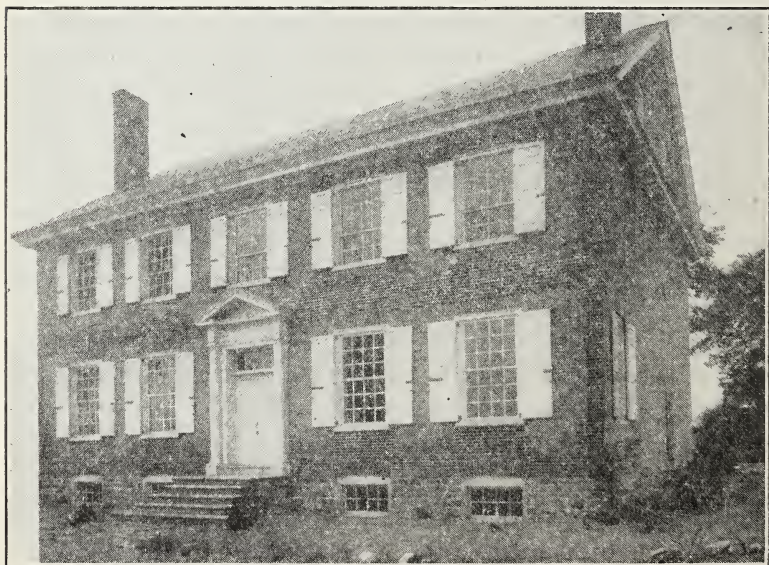
Here in this Thompson-Neely house, the only headquarters of any officer on the immediate banks of the Delaware at that time, came General Washington to confer with his generals. Some of his letters dated "Camp above the Falls," are thought to have been written from here, although the same dating would apply equally well to his own headquarters at the Keith house.

General Lord Stirling, who was quartered here, had special charge of gathering boats for crossing the Delaware. He delegated the detail of that work to Generals Mercer, Stephen and DeFermoy. Boats from up the river were assembled and secreted along the Pennsylvania shore back of Malta Island (later called Smith's Island), situated about midway between the Thompson-Neely house and Coryell's Ferry (now New Hope), one and one-quarter miles from each place, and about six miles above the place of crossing at McKonkey's Ferry. On Christmas day the boats were dropped down and moored back of Lowndes, now Taylor Island, just above the ferry. There is no record to show where the boats from Beatty's Ferry and other places south of the crossing were assembled, but presumably they were anchored at the same place.

Brigadier General Hugh Mercer took an active and conspicuous part in the battle of Trenton. He was also in the second engagement at Trenton, often referred to as the battle of Assunpink, where he commanded a column. He was in the van of that strategic night march from Trenton to Princeton, and in the engagement while enroute, at Stony Brook, near Princeton, on January 3, 1777, was wounded, dying nine days later on January twelfth. He was, I believe, the ranking officer to fall during the entire New Jersey campaign.³

(For footnotes, see appendix.)

From December 8 to 14, 1776, Washington made his headquarters in the Thomas Barclay house, now known as "Summerseat," formerly the Osborne house in Morrisville, Bucks County. It was successively owned by two signers of the Déclaration of Independence: Robert Morris⁴ and George Clymer,⁵ the latter making his home there. From December 14 until the battle of Trenton, Washington was quartered at the Keith house on the southern slope of Jericho Mountain, in the adjoining township of Upper Makefield, about 2.4 miles westwardly from the Delaware, near the public road leading from Brownsburg to Wrightstown. Brownsburg is on the Delaware about 3.7 miles north of Washington Crossing. The Keith house, substantially built of stone, was appropriately marked January 1, 1897, by the Bucks County Historical Society; but the headquarters of three major generals near the Keith house, lying on the southern and western slopes of Jericho Mountain, are not marked, although they are still standing in good states of preservation. As these are all within the jurisdiction of the Washington Crossing Park Commission, it is to be presumed that in due time they will receive attention.



"SUMMERSEAT," MORRISVILLE, PA.

Washington's Headquarters, December 8 to 14, 1776. (Front view as restored in 1930)

(For footnotes, see appendix.)



WASHINGTON AND HIS ARMY CROSSING THE DELAWARE RIVER CHRISTMAS NIGHT OF 1776



TABLET PLACED ON THOMPSON-NEELY HOUSE

OCTOBER 19, 1931

(Historic Inscription by Colonel Henry D. Paxson)

By the unveiling of the tablet placed on this shrine today by our sister society, an inspiring and patriotic example has been set, particularly to those of us who are members of the Sons of the American Revolution. I am advised that the Pennsylvania Historical Commission stands ready to place markers on any of these historic buildings.

The headquarters to which I have referred are the Hayhurst house, that of General John Sullivan;⁶ the Merrick house, that of General Nathaniel Greene,⁷ on whose staff, as an aide-de-camp was Thomas Paine,⁸ author of the "American Crisis," which he signed "Common Sense," beginning with these words: "These are the times that try men's souls," which was ordered to be read at the head of each regiment. A copy of this remarkable pamphlet is in the library of the Bucks County Historical Society autographed by Robert Thompson. The Doctor Chapman house, that of General Henry Knox,⁹ on whose staff was Captain Alexander Hamilton, a courageous soldier, and withal a polished

(For footnotes, see appendix.)

and scholarly gentleman, who on March 1, 1777, became an aide-de-camp on Washington's staff with the rank of Lieutenant Colonel, where in connection with his other duties, he gave special attention to Washington's correspondence. Hamilton distinguished himself in every engagement in which he took part, particularly at the siege of Yorktown, where he had a command, after which he retired from the army and resumed the practice of law. He continued, however, to be intensely interested in all matters for the advancement of his adopted country. He served one year in Congress, and then entered the Legislature of New York, where by his personal efforts, in face of much opposition, he succeeded in having that state approve the Constitution of the United States. He was Washington's first Secretary of the Treasury, and his most trusted friend and adviser. He was the father of our decimal monetary system of dollars and cents. He retired from Washington's cabinet January 31, 1795, to resume the practice of law, but he continued as the leader of the Federalist party until after the election of Jefferson to the presidency. Hamilton was a great lawyer and a great orator, the ablest political and constitutional writer of his day, and in every respect, as a statesman, he was the master of them all.¹⁰

General Davis, who founded the Bucks County Historical Society, invites attention to the fact that no battle was fought within the borders of Bucks County; it is thought, however, that part of the skirmishing at the battle of Crooked Billet, now Hatboro, was forced over the Montgomery County line into Bucks.¹¹

There are many headquarters of Washington and his generals, and places of their entertainment in Bucks County, very few of which are marked. However, one of the most historic of these, the Moland house, Washington's headquarters on the Little Neshaminy on the Old York road in Warwick Township, about half-a-mile north of Hartsville, then called Warwick Cross Roads, was marked in 1897 by the Bucks County Historical

¹⁰ (This footnote in the appendix.)

¹¹ For "The Battle of Crooked Billet" and "General John Lacy, our Quaker General," the hero of that battle, see papers by Gen. W. W. H. Davis, Bucks County Historical Society, Vol. II, page 173, and Vol. III, page 32. For Washington's Encampment on the Neshaminy, see brochure published by William J. Buck in 1896, and the Address delivered by Charles Henry Jones before the Pennsylvania Sons of the American Revolution, June 20, 1903.



BROWNSCOMBE

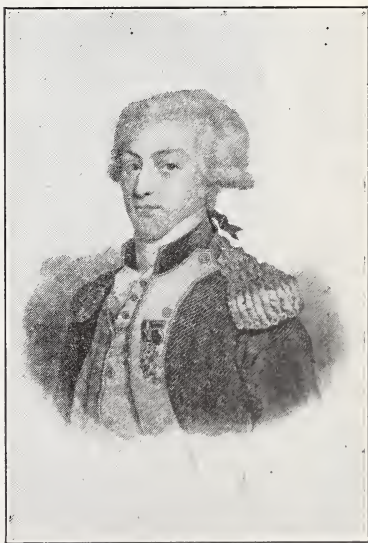
FIRST AMERICAN FLAG WITH STARS AND STRIPES

Authorized by Congress June 14, 1777. Said to have been unfurled for the first time at Washington's Encampment on the Little Neshaminy in August, 1777, and first carried in battle at the head of troops at Brandywine, September 11, 1777.

Society.¹² Washington rested there on the night of July 31, 1777, and returned to make it his headquarters from August 10 to 23, 1777, a longer time than he remained at any other encampment in Pennsylvania, with the exception of White Marsh and Valley Forge. He remained there with his army to await the movements of the enemy, supposing that Admiral Howe, with his fleet of 228 sail, was planning an attack on Philadelphia.

Washington's army, variously estimated at from 11,000 to 13,000 men, was encamped on the banks of the Neshaminy near by, and there they saw unfurled for the first time, the newly designed flag, with its stars and stripes, which had been adopted by Congress, June 14, 1777. There with Washington, on the banks of the Neshaminy, was the tent of John Marshall, Captain of Infantry in General Maxwell's brigade, who later became Chief Justice of the United States, and the great expounder of our Constitution. He died sixty years later on July 6, 1835, and at his burial July 8, the Liberty Bell was tolled, receiving at that time its primary fracture.

The Marquis de Lafayette, who arrived in Philadelphia from France, July 27, 1777, was on July 31, commissioned by Congress as a major general. On the following day, August 1, he accompanied Washington on a tour of inspection around the harbor of Philadelphia and vicinity. On August 20, he presented his credentials to General Washington at the Moland house, on the banks of the Little Neshaminy, and there formally joined the army. Nineteen days after breaking camp on the Neshaminy, viz.; on September 11, 1777, General Lafayette was wounded at the battle of Brandywine. He was taken to Bethlehem, where he was nursed back to convalescence by the Moravian



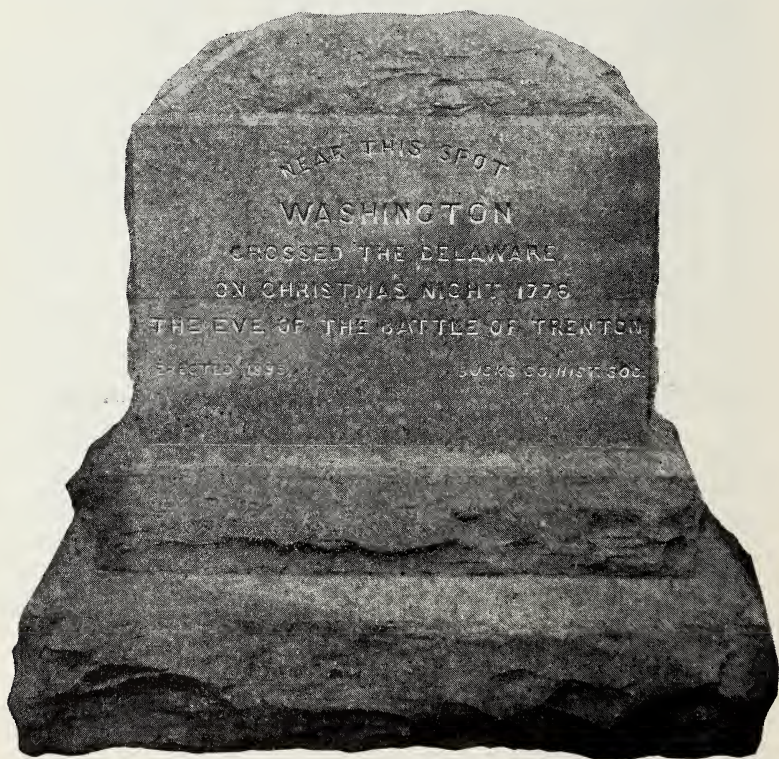
MARQUIS DE LAFAYETTE
1757-1834

¹² (This footnote in the appendix.)

sisters. He left Bethlehem October 18, 1777, and at once rejoined Washington's army, where he did splendid and heroic services down to the close of the war, being present at the surrender of Yorktown.

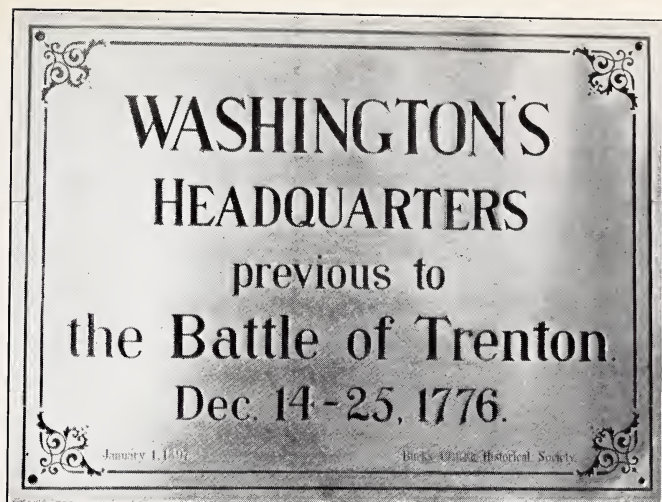
Count Casimer Pulaski, a Polish soldier, also joined Washington's army, as a private, while encamped on the Little Neshaminy. He distinguished himself so signally at the battle of Brandywine that Congress appointed him Commander of Cavalry, with the rank of brigadier general. He was mortally wounded at the siege of Savanna, October 9, 1779, dying two days later on October 11, at the age of thirty-two years.

Another memorial erected in 1895, by the Bucks County Historical Society is the granite monument on the Pennsylvania side of the Delaware at Washington Crossing, to mark the place



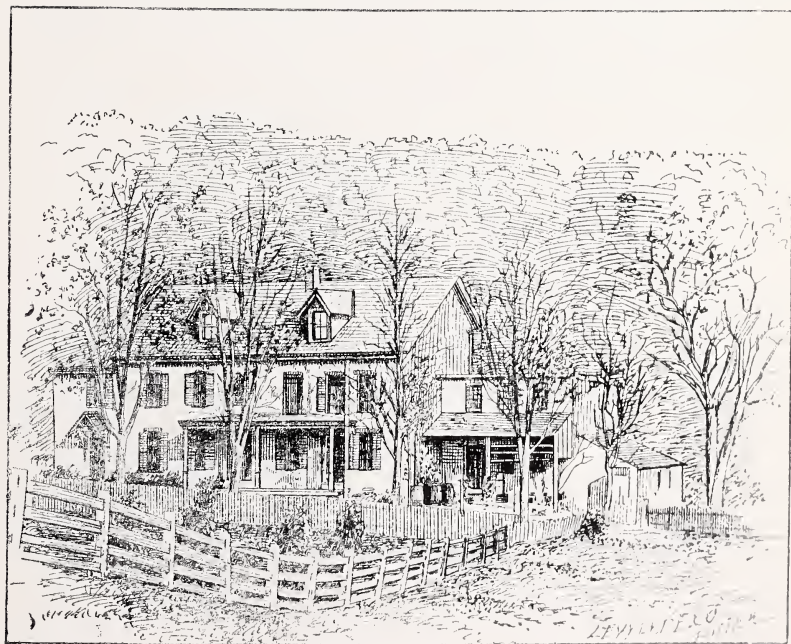
MONUMENT ERECTED IN 1895

By the Bucks County Historical Society, to mark the place of embarkment of Washington's Army, Christmas night of 1776, enroute for the Battle of Trenton



TABLET ON THE KEITH HOUSE

Unveiled January 1, 1897, by the Bucks County Historical Society



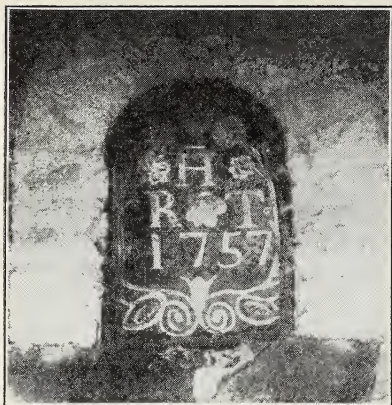
THE KEITH HOUSE

Washington's Headquarters, December 15 to 25, 1776, on southern slope of Jericho Mountain in Upper Makefield Township, Bucks County, Pennsylvania, 2.4 miles westwardly from the Delaware River on the road leading from Brownsburg to Wrightstown

of embarkment of Washington and his army, enroute to Trenton for that brilliant feat of arms on Christmas night of 1776. The New Jersey Society of Cincinnati has also erected a monument on the New Jersey side, where the troops landed, and set out on their long march to Trenton.

I have prepared a chain of title to the tract on which these buildings stand, in which I have been assisted by Mr. Warren S. Ely; this can be seen on file in the library of the Bucks County Historical Society. It is too voluminous to be made part of this paper, and I will therefore briefly state that the tract was known by the Indian name of Win-na-haw-caw-chunk. It lies on the southern boundary of Solebury township, with Upper Makefield township as its adjoinder, and is part of a tract of 7,500 acres known as the Manor of Highlands. The Pidcock tract was variously estimated to contain from 400 to 505 acres and allowances.

It appears that part of the tract was claimed by Thomas Rowland, who had been granted a warrant of survey in 1681 for 2,500 acres by William Penn. On September 9, 1690, the heir at law of Thomas Rowland, deceased, conveyed the Pidcock tract to Gilbert Wheeler. It further appears that John Pidcock came to America as an indentured servant of Gilbert Wheeler, and that in 1684, Pidcock took squatter possession of the tract, which he seated and improved and thereon established a trading station. This settlement gave him a good title as against any one excepting the Penns. There was some litigation between Wheeler and Pidcock in regard to the title, or to establish lines between their properties, or possibly it may have been an attempt to dispossess Pidcock, but the courts of Bucks County decided in Pidcock's favor, and to clear his title Wheeler by deed dated March 1, 1701, conveyed the entire tract to John Pidcock. Immediately after having his title confirmed, John Pidcock built the first or middle section of this house, little dreaming that it was destined to become an important shrine, revered by all lovers of liberty. The Thompson-Neely house as it now stands, was built in three sections, the central part, with the kitchen, by John Pidcock, in 1702. The western section was added by Robert Thompson in 1757, as indicated by



the date stone shown on the margin hereof; the initials stand for Robert and Hannah Thompson. The eastern end was added in 1786, by Robert Thompson after he got title in his own name.

The gristmill, now being restored, is the third to be built on this property. The original Colonial mill which ground grain for Washington's army was located down near the river, and was

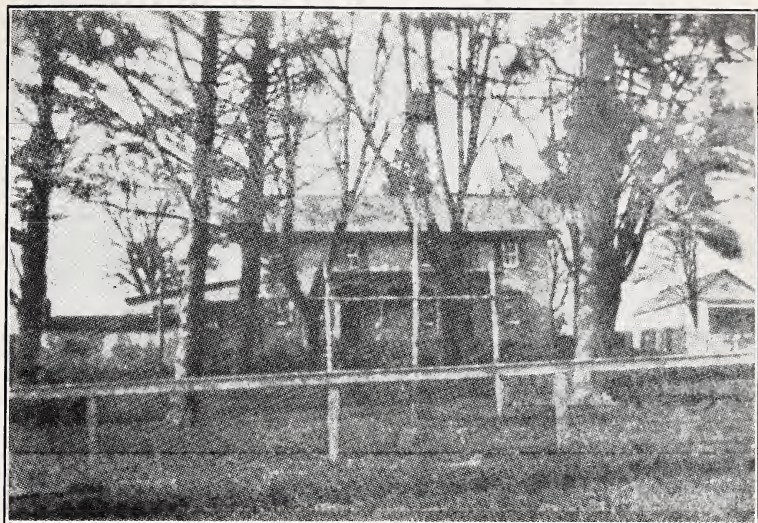
demolished in 1829, when the canal was dug. The second mill was then erected farther west where the present mill stands. This second mill was totally destroyed by fire early on the morning of August 29, 1873. The third, or present mill, was erected during the season of 1874.

Robert Thompson was a journeyman miller employed by John Simpson, and on the death of Simpson, he married his widow, and was in possession of the premises at the time it became the headquarters of Lord Stirling. Robert Thompson had the reputation of never turning a poor man from his mill with his bag empty, whether he had money or not.

You have doubtless noticed that Pidcock creek, which furnished power for the mills, now empties into the canal and not into the Delaware. The canal having on Saturday last, October 17, 1931, become the property of the State of Pennsylvania to be used as a park system, this creek will be one small source of supplementing a water supply for the canal.

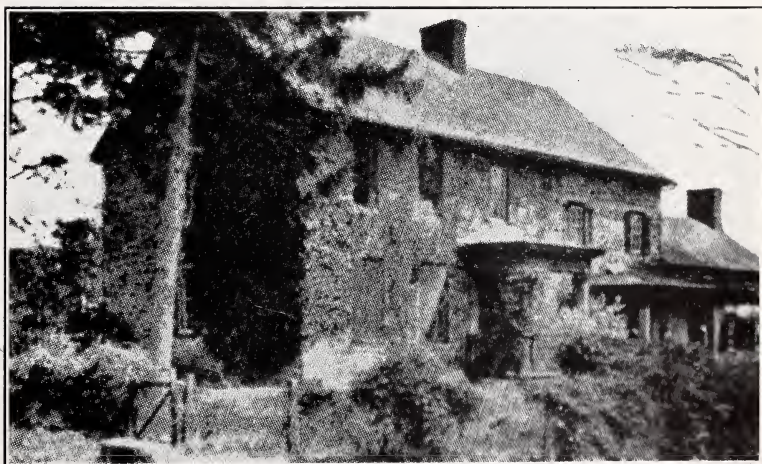
William Neely emigrated from Ireland, where he was born August 31, 1742.¹³ On June 24, 1766, he married Elizabeth,

¹³ William Neely emigrated from Ireland, where he was born August 31, 1742. On June 24, 1766, he married Elizabeth, only daughter of Robert Thompson, and his wife, nee Elizabeth (De la Plaine) Simpson. William Neely died July 10, 1818, and his wife, Elizabeth Thompson, died February 13, 1834, in her 86th year. They were the parents of two children: (1) Robert T., who married Sarah Beaumont, and (2) Jane, born in March, 1767, who became the second wife of John Poor, whose first wife, nee Martha Folsom, died August 3, 1784, while he was principal of a young ladies' seminary in Philadelphia. Jane was one of his pupils when he married her. She died May 15, 1827, after which John Poor removed to York Haven in York County, Pa. (See Davis' History of Bucks County, Vol. III, page 696.)



THE MERRICK HOUSE

Headquarters of General Nathaniel Greene prior to the Battle of Trenton



THE DR. CHAPMAN HOUSE

Headquarters of General Henry Knox prior to the Battle of Trenton

daughter of Robert Thompson, and shortly thereafter took charge of the gristmill. He was in charge of its operation at the time of Washington's encampment, and there he ground grain for the Continental army. He did not, however, own the property until after the death of Robert Thompson, which occurred July 18, 1803. By his will, Robert Thompson devised the gristmill and plantation to his daughter Elizabeth. The property remained in the Neely family for many years. It was finally subdivided and the greater part purchased by Reuben F. High, whose heirs on July 12, 1918, sold 179 acres 40 perches to Irvin M. High, from whom the Commonwealth of Pennsylvania on October 15, 1926, purchased 125.09 acres, covering that part on which these buildings stand, for the sum of \$35,000.¹⁴

This tract, aside from its Revolutionary lore, has a most interesting history. The mountain so prominently in evidence, on which the Washington Crossing Park Commission has erected the observation tower, 300 feet above tide, is known as Bowman's Hill, so named after Dr. Thomas Bowman who built his cabin at its base and by request was buried on its summit. He died in 1798. On the north slope there is located a so-called copper mine, operated in colonial times, discovered and reopened in 1854, and again put in operation in 1864.¹⁵

There is a tradition that the copper mine had been worked in prehistoric times by the Indians.

As already stated Pidcock was in possession of his property by right of his having seated and improved it, and his possession could be disturbed only by the Penns. Taking advantage of this condition certain Philadelphia and Bucks County capitalists, viz.: Hon. James Hamilton, then Lieutenant Governor of Pennsylvania; Chief Justice William Allen; Lawrence Growden, recorder of Bucks County; Langhorne Biles; William Plumstead and Joseph Turner, on July 17, 1752, with the connivance of Robert Thompson, secured a transfer of the old warrant, and on January 18, 1753, a patent was granted to William Coleman, in trust for their use and benefit. Six months later, on June 18, 1753, William Coleman deeded the property, by six separate conveyances, to the aforesaid six gentlemen, as Tenants in Com-

¹⁴ Deed recorded at Doylestown, Deed Book, No. 451, page 268, etc.

¹⁵ For an excellent paper on "The Solebury Copper Mine," see paper by Capt. John S. Bailey, Vol. I, page 6, of the Bucks County Historical Society.

mon, and they on the following day, June 19, transferred the fee to Robert Thompson, reserving, however, to their own use all mines and minerals, including copper, lead, and iron. The object of these gentlemen appears to have been to get possession of the old copper mine, and that of Robert Thompson, who had possession only by courtesy, to get absolute possession in his own name, in order that it might not go to the heirs of John Simpson.

The six deeds from William Coleman are not recorded, but three of them fell into my hands, viz.: those to Lawrence Growden, Langhorne Biles and Joseph Turner, which on July 15, 1920, I deposited in the library of the Bucks County Historical Society. As these three deeds belong to me, I will take the liberty, as president of the Bucks County Historical Society, of withdrawing them from its archives, and presenting them to the Washington Crossing Park Commission, for deposit in the Thompson-Neeley museum. These deeds have special value. They are witnessed by William Peters and George Clymer, the latter one of the signers of the Declaration of Independence, whose autograph signature is plainly written and well preserved. The deeds are signed by the grantor, William Coleman, who was a close friend of Benjamin Franklin. In 1727, Benjamin Franklin founded a literary club in Philadelphia, called "The Junto," and in estimating the character and worth of its members, as contained in his autobiography, has this to say of William Coleman:

"Lastly, William Coleman, then a merchant's clerk, about my age, who had the coolest, clearest head, the best heart, and the exactest morals of almost any man I ever met with. He became afterwards a merchant of great note and one of our provincial judges. Our friendship continued without interruption to his death, upwards of forty years, and the club continued almost as long."

Today is the fifth anniversary of the Bucks County Chapter, Daughters of the American Revolution. Therefore, allow me, women of that patriotic society, to congratulate you, and to thank you for the honor and dignity that you have added to the history of our beloved county.

This day has also been wisely chosen for this unveiling, as it is the one hundred and fiftieth anniversary of the surrender of Cornwallis at Yorktown, practically ending hostilities, which



THE MOLAND HOUSE

Washington's Headquarters, August 10 to 23, 1777, with tablet outlined on the eastern gable inscribed as shown above

had raged for exactly six years and eight months from April 19, 1775, when that resolute band of 130 "Minute Men" were aroused from sleep early in the morning on the arrival of Paul Revere from Boston, hurriedly gathered together on the green at Lexington, Mass., under command of Captain Jonas Parker, and confronted the British troops from Boston. There were more casualties in that skirmish than in both battles of Trenton. Brave Captain Parker and eight of his men fell dead, and a number were wounded. On the commons at Lexington where these brave heroes fell, a monument has been erected to their glory, and on a granite marker near by, there is inscribed these cautious and patriotic words of command by Captain Parker to his men on the approach of the British regulars: "Stand your ground, don't fire unless fired upon, but if they mean to have a war let it begin here."

And even now as we are assembled here in this quiet valley on the banks of the beautiful Delaware, the scenes at Yorktown on the York river are being reenacted in pagentry with more than 4,000 taking part, and with the president of the United States, members of his cabinet, senators and representatives, the governors of the thirteen original states, the head of our army with his staff; Marshall Petain, Major General Count de Chambrun, a direct descendant of Lafayette, and others come over from France; the present Lord Cornwallis come over from England to represent his illustrious ancestor; Baron DeKalb, a descendant of Baron John DeKalb, and Major Fritz von Steuben, a great-great-grandnephew of Baron von Steuben, come over from Germany, and a host of other distinguished guests and citizens to the number of many thousands, in attendance. Provision has been made for parking 20,000 automobiles.

I have always been thrilled on reading of the manner in which the surrender of Cornwallis was conveyed to the officials and citizens of Philadelphia.

Yorktown capitulated October 19, 1781, but it took Colonel Tilghman, one of Washington's aides-de-camp, the express rider, four days to reach his destination. He arrived in Philadelphia about midnight of the twenty-third. Thomas McKean was then president of the Continental Congress. Colonel Tilghman knocked at his door so vehemently, that a watchman was disposed to arrest him as a disturber of the peace. It was the duty

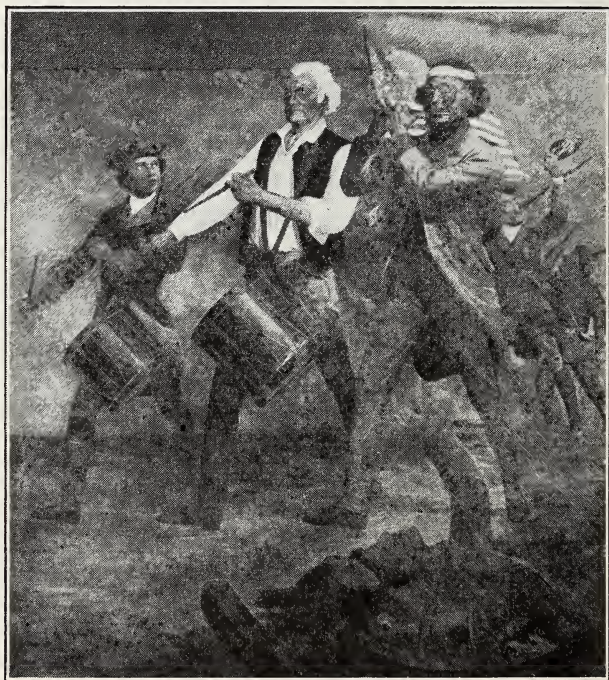
of this watchman, who patrolled the streets at night, to call out the time of day and the character of the weather, but on the morning of the twenty-fourth, after hearing the good news, he changed his cry, and sang out:

"Three o'clock in the morning and Cornwallis is taken."

The streets were soon thronged with people eager to learn details of the good news, and the state-house bell rang out for gladness.

This was the same General Cornwallis who trailed Washington, the "American Fabius," through New Jersey and Pennsylvania, and who on dining with Washington a few days after the surrender, said to him:

"When the illustrious part that your excellency has borne in this long and arduous conflict becomes matter of history, fame will gather your brightest laurels rather from the banks of the Delaware than from those of the Chesapeake."



BOWMAN'S HILL TOWER

(THE SITE OF A LOOK-OUT OF THE REVOLUTION)

IN COMMEMORATION OF THE CROSSING OF THE DELAWARE

ON CHRISTMAS NIGHT, 1776 AND THE
BATTLE OF TRENTON, DECEMBER 26, 1776

— WHERE THE GENIUS, COURAGE AND STRATEGY OF —

WASHINGTON

AND THE VALOR, SACRIFICE AND SUFFERING OF HIS
OFFICERS AND MEN

— ACHIEVED THIS BRILLIANT VICTORY —

— THE TURNING POINT OF THE AMERICAN REVOLUTION —

IN THE MONTH OF DECEMBER, 1776, ON THE WEST BANK OF THE
DELAWARE RIVER, WITHIN THE SHADOW OF BOWMAN'S HILL,
WASHINGTON AND HIS GENERALS HAD THEIR HEADQUARTERS
AND THE CONTINENTAL ARMY ITS ENCAMPMENT.

HERE DWELT THE HOPE OF LIBERTY IN AMERICA.

"ALL OUR HOPES WERE BLASTED BY THAT UNHAPPY AFFAIR AT TRENTON" — Lord Germain.

"WHEN THE ILLUSTRIOUS PART THAT YOUR EXCELLENCY HAS BORNE IN
THIS LONG AND ARDUOUS CONTEST BECOMES MATTER OF HISTORY,
FAME WILL GATHER YOUR BRIGHTEST LAURELS RATHER FROM THE
BANKS OF THE DELAWARE THAN FROM THOSE OF THE CHESAPEAKE." — Cornwallis.

"IT MAY BE DOUBTED WHETHER SO SMALL A NUMBER OF MEN EVER
EMPLOYED SO SHORT A SPACE OF TIME WITH GREATER AND MORE LASTING
RESULTS UPON THE HISTORY OF THE WORLD." — Trevelyan.

MAY LIBERTY'S BEACON
INSPIRE PATRIOTISM, PEACE AND FELLOWSHIP
AMONGST ALL PEOPLES

TABLET ON BOWMAN'S HILL TOWER

Erected December 17, 1931

(Size 5 feet high by 4 feet wide)

Inscription by Col. Henry D. Paxson
Historian of the Washington Crossing Park Commission

Bronze Casting by Bureau Brothers, Philadelphia

FOOTNOTES

¹ WILLIAM ALEXANDER.

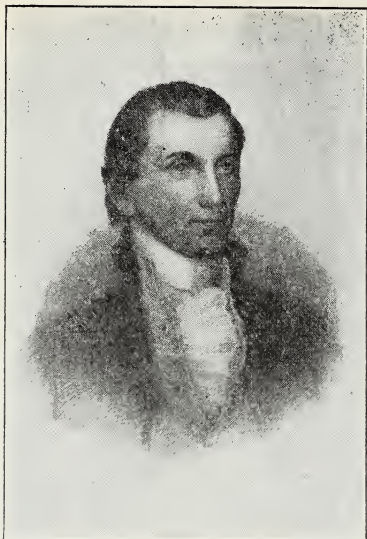
EARL OF STIRLING, was born in the city of New York in 1726. His father, James Alexander, was a native of Scotland and took refuge in America in 1716, after espousing the cause of the pretender in the rebellion of the previous year. He settled in New Jersey, and became Surveyor-General of that state. His mother was the widow of David Provost. Young Alexander went to England in 1755, and while there instituted legal proceedings to obtain the title of Earl of Stirling, to which his father was heir presumptive when he left Scotland. He did not succeed in gaining a legal recognition, but his right was generally conceded, and thereafter he was addressed as the Earl of Stirling. He returned to America in 1761. He married the daughter of Philip Livingston, a sister of Governor Livingston of New Jersey. He was a member of the New Jersey Provincial Council. Commissioned a colonel of militia in 1775, and on March 1, 1776, Continental Congress commissioned him a Brigadier General. He played an outstanding part in the battle of Long Island on



GENERAL WILLIAM ALEXANDER
THE EARL OF STIRLING
1726-1783

August 27, 1776, our first great battle as a free nation, where he was taken prisoner. Washington took immediate steps to regain his services, and exchanged him for Governor Montgomery Brown of Florida. He at once rejoined the army and took an active part in the campaigns at Trenton and through the Jerseys. On February 19, 1777, Congress advanced him to the rank of Major General. He was conspicuous in the battles of Brandywine, Monmouth, Staten Island, Ticonderoga and the Canadian campaign. He passed away at Albany, N. Y., January 15, 1783, at the age of fifty-seven years.

Lord Stirling became largely interested in mining ore and refining it into iron. In 1776 he was the sole proprietor of the Hibernia blast furnace and forges, in Morris County, and there he manufactured cannon, shot and shells for the Continental army. Immediately prior to the war his fortune was estimated at £100,000, but he entrusted his estate to agents, who on selling his property, took Continental money in payment. On his death his estate was practically insolvent.



JAMES MONROE
1758-1831

² **JAMES MONROE** was born April 28, 1758, in Westmoreland County, Virginia. He was from a family of Scotch cavaliers. His parents on both sides were Virginians. He entered William and Mary College, but his studies were interrupted by the breaking out of the revolution, when he left college and entered the Continental army. He had a most brilliant career both as a soldier and a statesman. He joined a Virginia regiment near New York and took part in the battles of Harlem Heights, White Plains and Trenton, in the last of which he was wounded in the shoulder. In 1777, he served on the staff of the Earl of Stirling and took part in the battles of Brandywine, Germantown and Monmouth. In 1778, owing to some complication as to his rank he retired from the army. About the time he left the army he formed the acquaintance of Thomas Jefferson, then governor of Virginia, with whom he studied law. Their intimacy continued over the remainder of their lives. As a statesman Monroe filled every post from assemblyman to president. In 1782,

at the age of twenty-four he entered the Virginia legislature. In 1783, he entered congress, serving three successive terms from 1783 to 1786. On retiring from congress he again entered the legislature. From 1790 to 1794, he served as a United States senator. In 1794, he was appointed minister to France. From 1799 to 1802, he was Governor of Virginia. In 1802, he was sent back to France, where he aided in the treaty by which France in 1803, sold Louisiana to the United States. In 1803 he was Minister to England and subsequently to Spain. In 1807, he entered the Virginia legislature for the third time, and in 1808 was chosen a second time Governor of Virginia, holding office but a short time, when he was called to the cabinet of President Madison, as Secretary of State, holding that office until he was elected to the presidency in 1817. From 1814 to 1815, he also served as secretary of war, and took part in the defense of Washington during our second war with England. He was twice elected President of the United States, first in 1816, receiving 183 electoral votes as against 34 for his opponent, Rufus King, the Federalist candidate. Four years later, when re-elected, he received every vote in the electoral college, excepting one, which was purposely cast against him, in order to preserve the tradition that Washington should be the only president elected by an unanimous vote. It was during Monroe's second term that General Lafayette returned to visit America for the second time. The period of his administration was known as the "era of good feeling," on account of the general prosperity of the country, and the absence of party strife. During his administration five new states were admitted, Mississippi, Illinois, Alabama, Missouri and Maine. His administration was also marked by the acquisition of Florida, the Seminole war, the Missouri Compromise and the relations with Europe in regard to South American affairs, which resulted in the announcement of the permanent policy of the Government, known as the "Monroe Doctrine."

At the close of his presidential term in 1825, he retired to his plantation in Virginia, but later made his home with his son-in-law in New York, where he died July 4, 1831. He was buried in New York, but many years after-

wards his body was moved and reinterred in the Hollywood Cemetery at Richmond, Virginia, where the body of his wife rests beside him.

During the year preceding his death he served as a member of the Virginia Constitutional Convention, that being his last public service.

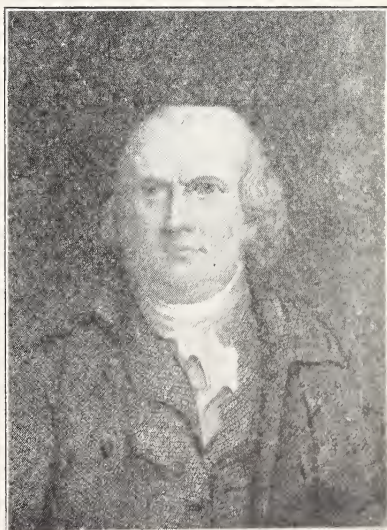
3 BRIGADIER HUGH MERCER was born at Aberdeen, Scotland, in 1720. He was educated at the University there, graduating as a medical doctor. He came to America in 1747 and settled as a physician near the present site of Mercersburg in Franklin County, Pa., originally called Black Town, in honor of James Black, who built a mill there in 1729, but later changed to Mercersburg in honor of General Mercer. General Mercer served as a captain under General Braddock in 1755, and was severely wounded in the battle near Fort Duquesne. In 1758, he was promoted to be a Lieutenant Colonel and accompanied General Forbes to Fort Duquesne, now Pittsburgh, and commanded that post for some time. Later he settled in Fredericksburg, Va., and on breaking out of the American Revolution joined the patriot army. On June 5, 1776, he was advanced to the rank of Brigadier General by Congress. As already stated he was mortally wounded at Stony Brook, January 3, 1777. He was cared for at a neighboring farm house, and received medical attention from the celebrated Dr. Benjamin Rush, but his wounds proved fatal and he passed away January 12, 1777. The sword which General Mercer carried can be seen in the rooms of the Pennsylvania Historical Society at Philadelphia.

In 1840 the St. Andrews Society erected a monument to his memory in Laurel Hill Cemetery, Philadelphia.

ROBERT MORRIS AND GEORGE CLYMER were two of the fifty-six signers of the Declaration of Independence. Of the signers, Pennsylvania contributed nine; Virginia seven; New Jersey five; Connecticut, Maryland, Massachusetts, New York and South Carolina, each four; Delaware, Georgia, North Carolina, New Hampshire and Rhode Island, each three. Both Robert Morris and George Clymer were among the founders and original charter members and trustees of Franklin College, now Franklin and Marshall College at Lancaster.

4 ROBERT MORRIS, an American financier, and a signer of the Declaration of Independence, was born in Lancastershire, England, January 20, 1734. His father was a Liverpool merchant extensively engaged in American trade. Robert came to America at the age of fourteen and entered the counting house of Charles Willing, a rich merchant of Philadelphia. In 1754 he entered into partnership with Thomas Willing, son of his employer, which firm soon became the largest importing house in America; they continued in business until 1793. The firm was very successful and at the outbreak of the American Revolution Robert had acquired a large fortune.

In June, 1775, he began his public career as a member of the Committee of Safety; in October of that year he was returned to the Assembly of Pennsylvania, to which he was re-elected in 1776. In November, 1776, he was appointed a



ROBERT MORRIS
1734-1806

delegate to Congress, holding all three offices at the same time. On July 1, 1776, he voted against the adoption of the Declaration of Independence, and on July 4, declined to vote either for or against its passage, believing the time premature and inappropriate. He was returned to Congress July 20, 1776, and on August 2, cheerfully signed his name to that immortal document. On retiring from congress in 1780, he again entered the legislature, retiring from that body for the fourth time in October of that year. It was at that time that the fortunes and conditions of the Continental army had reached their lowest ebb. Charleston had fallen, Gates had been defeated by Cornwallis and the treachery of Arnold cast a gloom over the entire country. The army was destitute and the credit of the country was exhausted with a debt of \$2,500,000. Congress then provided for the appointment of a superintendent of finance, to which office Robert Morris was chosen February 20, 1781. His chief program for raising money was by import duties, to which some of the states were opposed; also by loans and subsidies from France, and to inaugurate a policy of retrenchment. On different occasions he borrowed money on his own personal credit to carry on with. Without his aid Washington could not have carried out his campaign of 1781. It was mainly through the efforts of Morris that the Bank of North America was established, by means of which financial conditions of the country were improved.

In 1791, Robert Morris purchased a large tract of land, 2,500 acres in all, in what is now the Borough of Morrisville in Bucks County, which included "Summerseat," where Washington had his headquarters from December 8 to 14, 1776. The borough of Morrisville was named for him, and that place was seriously considered as the site for our national capital, but it finally lost out and the banks of the Potomac decided upon. Robert Morris did not live at "Summerseat," but made his home elsewhere in Morrisville. George Clymer held a mortgage for £27,405 against his property, which he purchased at sheriff's sale in 1798.

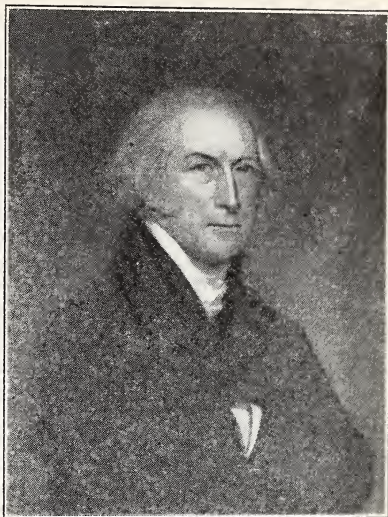
Robert Morris had the honor of nominating Washington for the presidency, and was offered the post of secretary of the treasury, which he declined recommending Alexander Hamilton, who was appointed. Morris was then elected to the United States Senate, where he served until 1795, when he retired from public life.

His land speculations, amounting to millions of acres, principally in the Genessee country in New York, Pennsylvania, Virginia and South Carolina, and of which "Summerseat" was a part, proved disastrous, and on February 16, 1798, he entered a debtor's prison at Philadelphia, where he was confined until August 26, 1801. He died at Philadelphia, May 8, 1806, in the seventy-third year of his age, leaving a widow to survive.

Robert Morris was indeed an eminent financier and a great patriot; he pledged his private fortune to uphold our cause, but later when he became involved in debt, under the vicious laws in force at that time, an ungrateful country allowed him to be imprisoned for debt. Nevertheless, his name stands written to his glory on history's page, for the heroic part he played in upholding the credit of our country in time of its greatest need, and our appreciation and admiration of his heroism increase as the years go by.

On June 18, 1926, his memory was honored by the unveiling of an heroic bronze statue on the steps at the Chestnut Street entrance of the Custom House at Philadelphia. This was erected jointly by The Philadelphia Bankers Association, The Fairmount Park Art Association and The Pennsylvania State Commission, toward the cost of which the State appropriated \$20,000. This state appropriation was secured through the efforts of Hon. H. M. Edwards of Scranton and other gentlemen of Welsh descent.

⁵ **GEORGE CLYMER**, signer of the Declaration of Independence, was born in Philadelphia, June 1, 1739. His grandfather, Richard Clymer, was a native of England, who arrived in Philadelphia in the fall of 1699. Richard had two sons, William and Christopher, and one daughter, Ann. Christopher married Debora, daughter of George Fitzwater and his wife, Mary Hardiman. They were the parents of two children, Elizabeth who died in infancy, and George the subject of this notice. George's mother died March 6, 1740, and his father on June 1, 1740, leaving George an orphan at the age of one year. Upon the death of his parents, he was taken to the home of William Coleman, who had married Hannah Fitzwater, and was therefore his uncle by marriage. William Coleman finally adopted him and left him the bulk of his large fortune. (See page 409 ante.)



GEORGE CLYMER
1739-1815

George Clymer received a liberal education at the College of Philadelphia (now the University of Pennsylvania), but left college before graduating to enter the counting-house of Mr. Coleman. In 1764, he left the counting-house of Mr. Coleman to enter that of Reese Meredith, whose wife was a distant relative of his mother, and on March 22, 1765, he married Elizabeth Meredith, his master's daughter, a sister of Gen. Samuel Meredith. In April, 1765, Reese Meredith admitted his son Samuel and his son-in-law, George Clymer, to partnership in the firm.

From 1770 to 1775 he was a member of Common Council of Philadelphia. In 1775 he became an alderman. On April 27, 1772, Governor Penn appointed him a justice of the Court of Quarter Sessions and Common Pleas of Philadelphia. He attended meetings at Philadelphia in October, 1773, and again in Boston in June, 1774, to protest against the Boston port bill and the importation of tea. He was made a member of a committee of correspondence, and joined the call for the first Constitutional Congress, which met in Carpenter's hall, September 5, 1774. At that meeting he was made treasurer of the Continental Congress, and on July 20, 1775, he and Michael Hillegas were appointed treasurers. From January 23 to 28, 1775, he was a member of the Provincial Convention. On April 24, 1776, he attended the famous meeting in the State House yard, and urged the organization of the "Associators," and to prove his sincerity accepted a captaincy in Col. John Cadwallader's "Silk Stockings." On July 22, he marched with his regiment to Amboy. On December 10, 1776, he marched with his regiment to Dunk's Ferry on the Delaware, but the ice prevented them from crossing to join Washington in his Trenton campaign, to attack the Hessians at Mount Holly; however, the battalion took part in the attack on Princeton, January 3, 1777. This was the only action that Captain Clymer ever took part in. He subsequently was advanced to the rank of Colonel. On August 2, 1776, he affixed his name to the Declaration of Independence.

George Clymer was active in many departments of state and government, which cannot be enumerated in this short notice, including the chairmanships on Cannon, Further Defense, Floating Batteries, Ships, Fort Island, Powder House and other committees. He was chairman of the Committee of Safety,

City Vigilants, Special Commissioner to Valley Forge and many other positions of trust. In the winter of 1777, he was in the Pennsylvania Assembly, for under the law at that time offices could be held at the same time both in the nation and the state.

On May 17, 1780, he, with Robert Morris and John Nixon, organized the Bank of Pennsylvania with a capital of £315,000 for the express purpose of furnishing the army with supplies. To this enterprise George Clymer and his brother-in-law, George Meredith, each subscribed £5,000 in silver. Mr. Clymer was re-elected to congress in 1780 and again in 1781. On December 31, 1781, congress incorporated the Bank of North America, of which George Clymer and Robert Morris were both directors.

In 1782, George Clymer moved to Princeton for the purpose of placing his two sons, Henry and Meredith, in the College of New Jersey. He remained there until October, 1785, when he was again elected to the Pennsylvania assembly, where he served until October, 1789.

In October, 1788, he was again sent back to Congress. In 1798, he purchased "Summerseat," Washington's headquarters at Morrisville, which in 1805 he deeded to his son, Henry, with whom he and his family made their home, and there he died January 23, 1813. His widow, who survived him, passed away at Northumberland, Pa., in February, 1815, at the age of 72 years. George Clymer's body lies buried at the corner of Hanover and Montgomery Streets in the city of Trenton, N. J.

Mr. and Mrs. Clymer were the parents of nine children: William Coleman, Julian, Henry who married the daughter of Thomas Willing, Elizabeth, Reese, Margaret who married George McCall, Nancy who married Charles Lewis, and George who married a Miss O'Brien. William Coleman, Julian, Elizabeth and Reese died young.

George Clymer is described as being a thoroughbred gentleman, one of the most useful and patriotic citizens of his day and generation, an earnest promoter of every scheme for improvement of his country in science, agriculture, polite learning, the fine arts or objects of mere utility. He was a student and a thinker, and no one was more ready to sacrifice himself and all he had for the sake of his country.

(See American Magazine of History, Vol. V, page 196, and Griswold's Republican Court, page 58.)

6 MAJOR GENERAL JOHN SULLIVAN was born February 17, 1740, at Somersworth, directly across the Salmon Falls River from Berwick, Maine, where his father, Owen Sullivan, with his family, settled on their arrival from Ireland in 1732. John was brought up on a farm, but at intervals of work, received a good education under direction of his father, who was a school-teacher. On arriving at maturity, John began the study of law, and in due time established himself in practice at Durham, New Hampshire, where he made his home over the remainder of his life.

In 1774 he was chosen a delegate to the first provincial congress, from which he resigned June 1, 1775, to accept his appointment as one of the eight brigadier generals appointed by congress on the organization of the army, of which George Washington was made commander-in-chief. On August 10, 1776, he was commissioned a major general. He took part in early engagements, including the battle of Long Island, August 27, 1776, where he was taken prisoner, but was soon exchanged for General Prescott of the British army. After General Charles Lee was captured in New Jersey, December 13, 1776, Sullivan was placed in command of his division

and led Washington's right at the battle of Trenton, where he distinguished himself for his gallantry and bravery. He was in the thick of the fight at Brandywine, where he commanded the right wing of the army. At the battle of Germantown he defeated the left wing of the British army. He spent that dismal winter of 1777-78 with Washington at Valley Forge.

The Indian massacres and depredations on the frontier along the Upper Delaware, the Minisinks, Cherry Valley, the Wyoming Valley and along the Susquehanna River, had assumed such proportions, that congress decided on a campaign of invasion, and directed Washington to send a strong detachment of the army into that territory and completely crush out not only the uprising, but also to destroy all sources of food supply on which they depended.

At the head of this uprising was that Mohawk Warrior Joseph Brandt, who was at the head of the confederated six nations of Indians, commonly called the Iriquois, and the disaffected settlers known as Tories under the leadership of Sir John Johnson, Col. John Butler and Guy Carleton.

Washington selected General Sullivan to head that expedition. He assembled his troops at Easton, Pa., from which place he began his march on June 18, 1779. He marched out of Easton, crossing the Bushkill Creek, thence over College Hill, following an Indian path, since known as Sullivan's Road. He crossed the Blue Mountains at the Wind Gap, thence over the Poconos and Moosic Mountains into the Wyoming Valley at Wilkes-Barre. From Wilkes-Barre they marched along the eastern shore of the Susquehanna to Tioga Point, now the City of Athens. At that point the Tioga or Chemung river empties into the Susquehanna. Just above their junction where they flow close together, Sullivan built four strong block-houses, stretching from river to river, which was called "Fort Sullivan." A monument has since been erected at that place to mark its location.

Thirty-five days after leaving Easton, on July 22, they encountered the enemy at Newtown, near Elmira, N. Y., where they were joined by General Clinton and his army, and what was called the "Battle of Chemung" was fought. The enemy was completely annihilated, after which they destroyed



JOHN SULLIVAN
1740-1795

all their growing crops consisting mostly of corn. Continuing their march they destroyed all Indian settlements, village after village, after which they began their return march back to Easton, where they arrived October 15, 1779.

One hundred years later, on July 22, 1879, an imposing monument was erected on the battlefield at Newtown, and on June 18, 1900, the George Taylor Chapter D. A. R. of Easton erected a natural boulder memorial, with an inscribed bronze tablet on College Hill, Easton, to mark the route of Sullivan's trail.

Owing to some adverse criticism, General Sullivan retired from the army. He was afterwards a member of Congress for three years. In 1786, he was president of New Hampshire. In 1789, he was appointed district judge, which office he held until his death, which occurred at Durham, N. H., January 23, 1795.

(See "General Sullivan's Indian Expedition, 1779"—New York State Publication, 1887, and Paper by Ethan Allen Weaver, read October 16, 1929, before the Northampton County Historical Society. See also his letter to General Washington, written January 10, 1781, from the Barclay house, Morrisville, Pa.)



GENERAL NATHANIEL GREENE
1742-1786

7 MAJOR GENERAL NATHANIEL GREENE—Born August 7, 1742, at Patowomot, Rhode Island. His father was a preacher among Friends, and educated his son very simply, training him from childhood to work on the farm and at his anchor forge and gristmill, but Nathaniel by his own perseverance and ambition acquired a splendid education. In 1770 he was chosen as a member of the Rhode Island assembly, and to the great scandal of the Quakers was one of the first to engage in military drill, whereupon he was read out of meeting. On July 20, 1774, he married Catharine Littlefield, and during the same year he enlisted as a private in the Kentish Guards. In 1775 he was appointed to the command of the Rhode Island contin-

gent and sent to the army at Boston with the rank of Brigadier General, conferred upon him by the state and confirmed at Philadelphia meeting, June 15, 1775. On August 9, 1776, he was commissioned by Congress as a Major General. He was in command of troops on Long Island in the affair at Harlem Heights, where he was under fire for the first time.

He was the commanding general at the battle of Fort Mifflin, where he was forced to surrender November 16, 1776. In the New Jersey campaign he distinguished himself for his ability as a leader, particularly at Trenton and Princeton. He was the youngest of that galaxy of four commanding generals who under the leadership of Washington, crossed the Delaware river on that stormy night of Christmas, 1776.

At the battle of Brandywine he commanded a division. At Germantown he commanded the left wing of Washington's army. He distinguished himself at the battle of King's Mountain in North Carolina, October 7, 1780, and on October 30, succeeded General Gates in command of the Army of the South. A detachment of his army under command of General Daniel Morgan gained a decisive victory over General Tarleton, January 17, 1781, at the battle of Cowpens, South Carolina. General Greene carried on his campaign in the south with such success, that he finally secured military possession of Georgia

and the Carolinas, with the exception of three coast towns. For his services and military prowess, Congress struck off and presented him with a gold medal, and made him grants of valuable lands.

Although the siege of Yorktown, October 19, 1781, practically ended the war, the British troops were not withdrawn. Savannah fell July 11, 1782. The last blood of the war was shed by the killing of Captain Wilmot, September, 1782.

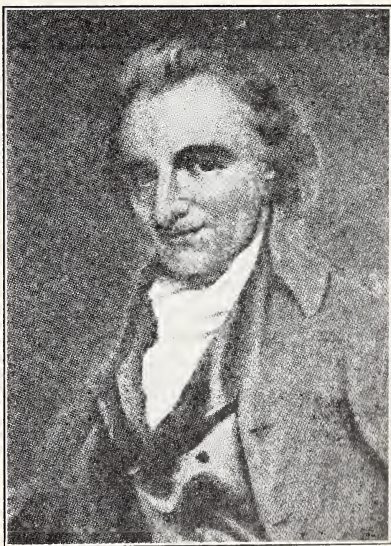
On December 4, 1782, the American detachment at 11 o'clock, took formal possession of Charlestown, S. C. At three in the afternoon, General Greene escorted Governor Mathews to the town hall, and then witnessed the British gunboats sail away for England and the war was ended. A preliminary treaty of peace was signed at Paris, November 30, 1782; and on September 3, 1783, a definitive treaty was signed at Versailles in France, by which the United States was formally acknowledged by Great Britain to be free, sovereign and independent.

When peace was restored in 1783, General Greene retired to "Mulberry Grove," his estate near Augusta, Georgia, where he died of sunstroke, June 19, 1785, in his 44th year.

On May 18, 1791, General Washington, while traveling in the south, stopped to dine with the widow of his old friend and companion in arms, General Greene.

General Nathaniel Greene was one of Washington's outstanding generals, often referred to as the most competent of them all. He was described by Lord Cornwallis: "As dangerous as Washington, vigilant, enterprising and full of resources."

8 THOMAS PAINE was born at Thetford, County of Suffolk, England, January 29, 1737. He was the son of a Quaker. He left school at the age of thirteen and was put at his father's trade of staymaking. In 1759 he established himself as a staymaker at Sandwich, County of Kent. In 1762 he became an exciseman, from which for some supposed irregularity, he was temporarily suspended, supporting himself between times by preaching as a Methodist. Benjamin Franklin advised him to go to America, and gave him letters to Richard Bache. He found employment as editor for eighteen months on Aitkin's "Pennsylvania Magazine" or "American Monthly Museum." He was primarily a political and philosophical writer. He entered heartily in the spirit of the times, and allied himself with the Patriot or Whig party. He joined the Flying Camp as a Pennsylvania militiaman. General Greene made him one of his aides-de-camp, and as such he took part in that disastrous battle of Fort Washington. Thomas Paine was with Wash-



THOMAS PAINE
1737-1809

ington's retreating army through New Jersey, crossing the Delaware into Pennsylvania where he was later quartered with General Greene at the Merriken house prior to the battle of Trenton, in which, as a member of General Greene's staff he took a conspicuous part. His military experience was,

however, brief, but it prompted him to write a series of sixteen pamphlets, entitled "The Crisis," which he signed "Common Sense," the first one dated December 19, 1776, beginning with the words: "These are the times that try men's souls," and the last one dated December 9, 1783, all of which were widely read and had a great influence over the people. He is said to have begun writing the first of these patriotic pamphlets while on his retreat with the army from Fort Lee, the first one of which was published six days before he marched with General Greene to take part in the Battle of Trenton.

In January, 1777, he was appointed secretary of the commission sent by Congress to treat with the Indians at Easton, Pa., and in April he was elected secretary of the Congressional Committee on Foreign Affairs. In 1781, he went to France as secretary to John Lawrens on a Government mission to raise money. They were cordially received by the King of France and returned with two and one-half million livres in silver, and in addition much clothing and military stores. In 1782, at the suggestion of Washington, congress granted Paine \$800 to use his pen in support of the country. In 1784, the State of New York presented him with 277 acres of land at New Rochelle, N. Y., and Pennsylvania gave him \$3,000 in money. In 1787, he went to France to exhibit his new bridge to the Academy of Science in Paris. He also visited England and was lionized in London by the party of Burke and Fox. He brought odium upon himself by writing in 1791-92, his pamphlet, "The Rights of Man," for which a suit was brought against him, but he had already departed for France, where he was enthusiastically received and highly honored by being made a Citizen along with Washington, Hamilton and Madison. He was elected as a delegate to the French Convention. He opposed the deposing of King Louis XVI, whereupon on December 28, 1793, he was committed to the Luxemburg prison, where he was kept for ten months. Just before his arrest he had finished the first part of his "Age of Reason," the famous exhibition of Deism. While in prison he worked on the second part. On the change of government he was released, and re-entered the Convention where he sat until its adjournment, October 26, 1795. He returned to America in 1802, landing at Baltimore, October 30. He was pleased to find that his services in the Colonies were greatly remembered, but alas his "Age of Reason," had cost him the esteem of the religious part of the community. On his retirement he lived successively at Bordentown, N. J., New Rochelle, N. Y., and New York City, dying at the latter place June 8, 1809. He was buried at New Rochelle, where a monument was erected to his memory in 1839, although his body had been exhumed and carried to England by direction of William Cobbett in 1819.



GENERAL HENRY KNOX
1730-1806

9 MAJOR GENERAL HENRY KNOX, who came from Scotch-Irish Presbyterian ancestry, was born in Boston, July 25, 1730. He received but a common school education. At the age of twenty-five years he became a bookseller at Boston, continuing in that profession until the battle of Lexington in 1775, when he entered the Continental army, serving as an aide to General Aaron Ward at the battle of Bunker Hill, and during the siege of Boston.

In December, 1775, Washington sent him to Lake George and the Canadian frontier in quest of ordnance-stores and cannon to fortify Dorchester Heights. He executed his commission with the greatest fidelity

under most trying conditions. On December 17, he wrote to Washington: "Three days ago it was very uncertain whether we could get them over until next spring, but now, thank God, they shall go. I have made forty-two exceedingly strong sleds, and have provided eighty yoke of oxen to drag them as far as Springfield, where I shall get fresh cattle to take them to camp." His cargo included more than fifty cannon, mortars and howitzers. For this and other faithful services he was made a Brigadier General of Artillery. He served with great distinction at Trenton and Princeton. He was also engaged in the battles of Brandywine, Germantown and Monmouth, and in the siege of Yorktown. He passed the winter of 1777-78, with Washington at Valley Forge, laboring to improve the discipline and efficiency of the army. In 1781, Congress commissioned him as a major general. In 1783, he was delegated by Washington to arrange with Sir Guy Carleton for the capitulation of New York. General Knox was in fact, one of Washington's most trusted advisers. As an officer he was most faithful and conspicuous for his bravery and skill in handling artillery, and for his tireless energy.

From 1789 to 1795, he was secretary of war in Washington's cabinet, having also charge of the navy, which at that time was not a separate bureau.

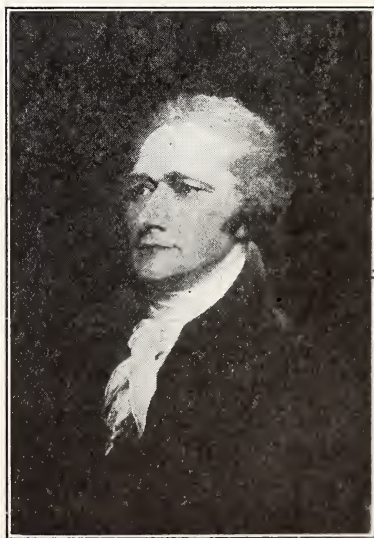
General and Mrs. Knox were close personal friends of the General Washingtons during the days of the Republican court in Philadelphia. The Knox family and the family of Judge Chew were visited by the Washingtons more than any other families in Philadelphia. Young Knox, when a bookseller, had married Miss Flucker, much against the wishes of her family, but Knox, the brave general, gave her a prouder name than was ever dreamed of by her father, Mr. Secretary Flucker.

Both General and Mrs. Knox are described as having been "enormously large," in fact the largest couple in Philadelphia at that time. They were delightful entertainers and splendid conversationalists.

On his retirement from public life, Knox removed first to St. Georges in Maine and later to Thomaston, Mass., where he passed away October 25, 1806.

10 ALEXANDER HAMILTON

was born January 11, 1757, at Charles Town, on the Island of Nevis, a small island of the British West Indies. His father, James Hamilton, was of Scotch ancestry, and his mother a French Huguenot. At the age of fifteen he was sent to America to pursue his studies, arriving in Boston in October, 1772. From Boston he went direct to Elizabethtown, N. J., where he attended a grammar school to prepare for admission to King's College (now Columbia University) at New York. He entered college during the latter part of 1773, and endeavored to fit himself for the medical profession, but the contentions of the Colonies with England gave a different direction to his impulsive and inspiring mind, and on March 6, 1774, we find him attending a meeting at Boston, called to protest against the Boston Port Bill. He was then but seventeen years of age, but was called



ALEXANDER HAMILTON
1757-1804

upon to address the meeting. He was slightly built, short of stature and not robust, but the vigor and maturity of his intellect and his eloquence were the admiration of his auditors. This was the beginning of his public career which in later years became the pride and admiration of the entire country. On July 6, 1774, he attended and addressed a meeting in New York, assembled to take action on the calling of a general congress, where his impassionate and well-reasoned speech brought him to the notice of men of prominence. But no attempt is made in this short biographical notice to record the career of this brilliant man, whose history is so well known, and whose services can scarcely be overestimated. (See page 404, ante.)

In 1780, he married Elizabeth, the second daughter of General Philip Schuyler, of Albany, N. Y. Hamilton's life came to a tragic end. He died in the city of New York, July 12, 1804, having been fatally wounded July 11, 1804, in a duel at Weehawken, N. J., on the Hudson opposite New York by Aaron Burr, who was jealous of Hamilton's political schemes. The death of Hamilton was regarded as a national calamity. After killing Hamilton, Burr fled from justice, crossing the Delaware by the Lambertson or Lower Trenton ferry into Pennsylvania, July 19, 1804. Burr spent the latter part of 1806 at Morrisville with General Jean Victor Maria Moreau.

12 THE MOLAND HOUSE, a front view of which is shown herewith, is on the Old York Road in Warwick Township, Bucks County. It stands on the north slope of the Little Neshaminy Creek, which it faces. The house is substantially built of stone, in a splendid state of preservation, size 24 by 29 feet, with a two-story addition, 18 by 23 feet. The tract of land on which it is erected, is part of 541 acres, called "Coldchester," surveyed to James Boyden, 10th of the 7th month, 1682. James Boyden transferred it to his grandchildren. In 1741, 325½ acres were sold to John Moland, who by will dated November 8, 1760, devised it to his children, Elizabeth, Hannah, Grace and Joseph. A deed from Joseph Moland to John Richards recites that the widow of John Moland and his daughters, Elizabeth and Grace, are deceased, and the property, then 134 acres, became vested in Joseph Moland and his sister Hannah, intermarried with ——— Hay, as tenants in common. They were therefore the owners at the time of Washington's encampment, and the house bears their family name of Moland.

The subsequent owners were as follows: On April 28, 1789, Hannah Hay, widow, conveyed her one-half to Daniel Longstreath; on April 30, 1789, Daniel Longstreath conveyed the same half to John Richards; on June 9, 1789, Joseph Moland conveyed his one-half to John Richards, these transfers vested the entire 134 acres in John Richards; on April 1, 1791, John Richards conveyed the same tract to Elijah Stinson; on April 1, 1842, the executors of Elijah Stinson conveyed the same to Reuben P. Ely; on March 8, 1856, Reuben P. Ely and his wife conveyed 106 acres and 92 perches to William Rothwell; on April 3, 1889, the surviving executor of William Rothwell conveyed the same to Sarah R. Campbell; on November 6, 1896, Sarah R. Campbell conveyed the same to Gerardus Wynkoop Rubinkam, and on March 29, 1911, Rubinkam conveyed the same 106 acres 92 perches to R. Sherman Robbins, the present (1931) owner.

Family Bibles in the Library of the Bucks County Historical Society

INSCRIPTIONS COPIED BY MRS. WARREN S. ELY, DOYLESTOWN, PA.

THERE are eighty-nine old Bibles in the Library of the Bucks County Historical Society, and in addition there are a number of New Testaments. The following is a memorandum of inscriptions and family data contained in forty-two of the Bibles. Many of the Bibles do not contain inscriptions.

(Alphabetically Arranged)

- | | |
|----------------------|------------------------|
| 1—Angene, Jacob | 22—Kirk, Isaac |
| 2—Balderston-Simpson | 23—Kroesen |
| 3—Child | 24—Krusen |
| 4—Clift-Jenkins | 25—Large |
| 5—Cooper | 26—Larue |
| 6—Cornell | 27—Martindell-Bridgman |
| 7—Cressman | 28—Moore |
| 8—Doyle | 29—Morris |
| 9—Eastburn | 30—Oberholtzer |
| 10—Ely, Isaiah | 31—Porch |
| 11—Emig, John George | 32—Roe |
| 12—Foulke | 33—Shaw, Susanna B. |
| 13—Green, Benjamin | 34—Smith, Canby |
| 14—Green, Evan | 35—Smith, Scoggens |
| 15—Grier | 36—Smith, Summers A. |
| 16—Hardman | 37—Smith, William |
| 17—Hough | 38—Souder |
| 18—Howell | 39—Stover |
| 19—Jenks | 40—Strickland-Bennett |
| 20—Kelly, George | 41—Todd-Chapman-Mercer |
| 21—Kelly, Phineas | 42—Weaver |

JACOB ANGENE BIBLE

Jacob Angene was born Anno Domini September, 1740.

Frau Elizabeth born in the year Anno Domini 1725, April 29th.

Gertraut in the year Anno 1762—November 11th.

Elizabeth was geboren November 9th, 1763.

Maria was born Anno 1765—March 12th.

Barbara was born Anno 1770—April 8th.

Jacob was born 2nd day of December, 1773.

The children of Martain Kulb:

Cadrin Kulb born in the year 1749, August the 6th day.

Barra Kulb born in the year 1753, March the 13th.

Elizabeth Kulb born in the year 1755, February the 12th.

Merry Kulb born in the year 1760, May the 2nd.

Madlen Kulb born in the year 1757, March the 12th.

Susanna Kulb born in the year 1762.

Nanne Kulb in the year 1765, October 12th.

BALDERSTON-SIMPSON FAMILY BIBLE

Ann Balderston's Book, desposited by Fannie Palmer, Newtown, daughter of Franklin Palmer and Martha Horn Palmer, his wife, March, 1921.

BALDERSTON—John and Deborah Watson were married the 21st day of the 10th mo., 1767, at Falls Meeting.

John W. and Elizabeth Buckman were married 17th of 11th mo., 1801, at Falls Meeting.

Ann Balderston was killed by lightning the 25th of 8th mo., 1802.

Mark Balderston and Elizabeth Lloyd were married the 19th of 11th mo., 1805, at Horsham Meeting.

MITCHELL—John and Hannah Balderston were married the 10th of 12th mo., 1817, at Falls Meeting.

John Mitchell died the 14th of 12th mo., 1821.

SIMPSON—James and Ann Balderston were married the 14th of the 5th mo., 1823, at Falls Meeting.

John Simpson and Ruth Whitson were married at Buckingham Meeting.

James Simpson and Susanna Satterthwaite were married the 11th of 5th mo., 1803, at Falls Meeting.

Susanna Simpson departed this life the 3rd of 4th mo. 1821.

BALDERSTON—Elizabeth, widow of Mark, departed this life 17th of 10th mo. 1826.

PALMER—David, Jr., and Susanna Simpson were married 12th of 10th mo., 1831, at Falls Meeting.

BROOKS—Charles and Elizabeth Simpson were married 14th of 10th mo., 1835, at Falls Meeting.

MAHAN—John and Ruth Simpson married the 14th of 10th mo., 1835, at Falls Meeting.

SIMPSON—John and Ann Comfort married the 11th of 10th mo., 1837, at Falls Meeting.

HILLBORN—Ruth (formerly Simpson) died the 6th of 3rd mo., 1858, aged 85 years, 2 mos., 15 days.

BALDERSTON—John Balderston, son of John and Hannah, was born 26th of 3rd mo., 1740.

Deborah Balderston, dau. of Mark and Ann Watson, was born 23rd of 3rd mo., 1744.

Ann, daughter of John and Deborah Balderston, born 28th of 8th mo., 1768.

Mark, son of John and Deborah, born 25th of 7th mo., 1770.

Merab, daughter of John and Deborah, born 25th of 7th mo., 1770.

Mark Balderston died 10th of 8th mo., 1770.

Hannah, daughter of John and Deborah, born 30th of 5th mo., 1772.

Ann Balderston died 1st of 11th mo., 1774.

John, son of John and Deborah Balderston, born 24th of 2nd mo., 1775.

Mark, son of John and Deborah Balderston, born 1st of 5th mo., 1778.

Ann, daughter of John and Deborah Balderston, born 15th, 12th mo., 1780.

Ezra, son of John and Deborah Balderston, born 13th, 1st mo., 1783.

Deborah Balderston died 17th of 4th mo., 1794, aged 50 yrs., 13 days.

John Balderston died 26th of 4th mo., 1821, aged 81 yrs., 1 mo.

Mark Balderston died 3rd of 9th mo., 1823, aged 45 yrs., 4 mos., 2 days.

John W. Balderston died 26th, 2nd mo., 1842, aged 67 yrs.,

2 days. (He attached the letter W. for distinction as there were a number of that name.)

Merab Balderston died 6th of 4th mo., 1842, aged 71 yrs., 8 mos.

SIMPSON—James, son of John and Kesia, was born the 9th of 12th mo., 1851, died 13th of 6th mo., 1852.

Susanna, daughter of John and Ann, died 6th of 3rd mo., 1852, aged 11 yrs., 6 weeks.

William, son of John and Kesia, born 10th of 5th mo., 1853.

Elizabeth, daughter of John and Kesia, born 19th of 1st mo., 1857.

ROWLAND—Hannah S., wife of Nathan Rowland, died 12th mo., 6th, 1858, in 41st year of her age.

SIMPSON—John, son of John and Hannah, born 23rd of 10th mo., 1739.

Ruth Simpson, daughter of David and Clement Witson, was born 23rd of 1st mo., 1733.

David Simpson, son of John and Ruth, was born 4th of 4th mo., 1765.

Hannah Simpson, daughter of John and Ruth, was born 20th of 4th mo., 1767.

John Simpson was born 5th of 8th mo., 1769.

Ruth Simpson was born 21st of 12th mo., 1772.

James Simpson was born 17th of 6th mo., 1775.

David Simpson died the 5th of 6th mo., 1831.

Hannah Shinn, formerly Simpson, died 7th of 2nd mo., 1833.

John died 4th of 11th mo., 1835.

James died 23rd of 4th mo., 1842, aged 66 yrs., 10 mos., 6 das.

MITCHELL—Hannah Mitchell died 21st of 6th mo., 1850, aged 78 yrs., 22 das.; buried at Germantown.

SIMPSON—John, son of James and Susanna, died 28th of 6th mo., 1857, aged 63 yrs., 7 mos., 7 das.

Mary, daughter of James and Susanna, was born 10th of 8th mo., 1805.

Elizabeth, daughter of James and Susanna, was born 3rd of 6th mo., 1807.

Susanna, daughter of James and Susanna, born 16th of 6th mo., 1809.

Ruth, daughter of James and Susanna, born 11th of 7th mo., 1811.

John, son of James and Susanna, born 21st of 11th mo., 1813.

Hannah, daughter of James and Susanna, born 8th of 4th mo., 1818.

PALMER—James, son of David and Susanna, born 16th of 9th mo., 1832.

Charles, son of David and Susanna, born 28th of 5th mo., 1834.

Ann, daughter of David and Susanna, born 6th of 8th mo., 1836.

Franklin, son of David and Susanna, born 20th of 12th mo., 1848.

ROWLAND—Charles, son of Nathan and Hannah, born 5th of 6th mo., 1852.

Charles, son of Nathan and Hannah, died 25th of 3d mo., 1855.

MAHAN—Elizabeth, daughter of John and Ruth, born 6th of 5th mo., 1852.

SIMPSON—Ann, widow of John, died 6th of 5th mo., 1860, in her 80th year.

BROOKS—John, son of Charles and Elizabeth, born 14th of 9th mo., 1836.

MAHAN—Susanna, daughter of John and Ruth, born 15th of 9th mo., 1836.

PALMER—David, Jr., born 17th of 6th mo., 1837.

SIMPSON—Rebecca, born 27th of 7th mo., 1838.

BROOKS—James, born 24th of 10th mo., 1838.

MAHAN—Abel, born 13th of 7th mo., 1840.

PALMER—Joseph, born 23rd of 10th mo., 1840.

BROOKS—Samuel, born 31st of 10th mo., 1840.

SIMPSON—Susanna, daughter of John and Ann, born 23rd of 1st mo., 1841.

Hannah and Nathan Rowland married the 7th of 10th mo., 1841, in Philadelphia.

ROWLAND—James M., son of Nathan and Hannah, born 6th of 2d mo., 1843.

BROOKS—Ann, daughter of Charles and Elizabeth, born 23rd of 2nd mo., 1843.

PALMER—Susanna, born 26th of 11th mo., 1843.

ROWLAND—Lydia, born 16th of 6th mo., 1844.

SIMPSON—Rebecca, died 20th of 5th mo., 1841, aged 2 yrs., 9 mos., 23 das.

PALMER—Ann, daughter of David and Susanna L., died 2nd of 10th mo., 1842, aged 6 yrs., 2 mos.

ROWLAND—James M., son of Nathan and Hannah, died 26th of 7th mo., 1843, aged 5 mos., 20 das.

Lydia died the 8th of 7th mo., 1844, aged 3 weeks and 1 day.

Henry, son of Nathan and Hannah, born 21st of 4th mo., 1846.

BROOKS—Mary, daughter of Charles and Elizabeth, born 26th of 5th mo., 1846.

ROWLAND—Henry, died 23rd of 6th mo., 1846, aged 9 weeks.

PALMER—Mary Ann, daughter of David and Susanna, born 1st of 7th mo., 1846.

SIMPSON—Ann Comfort, wife of John, died the 20th of 2nd mo., 1849.

John and Kesia (Smith) married 16th of 10th mo., 1850.

John, son of James and Susanna, died 28th of 6th mo., 1857, in 45th yr.

William, son of John and Kesia, died 7th mo., 20th, 1860, in 8th year.

BROOKS—Samuel, son of Charles and Elizabeth, died 24th of 2nd mo., 1848, aged 7 yrs., 4 mos.

ROWLAND—Franklin, son of Nathan and Hannah, born 10th mo., 20th, 1847, in Philadelphia.

BROOKS—Isaac, son of Charles and Elizabeth, born 14th of 9th mo., 1849.

ROWLAND—Florence, daughter of Nathan and Hannah, born 26th of 10th mo., 1849.

Franklin, son of Nathan and Hannah, died 3rd of 8th mo., 1849.

CHILD BIBLE

CHILD—Cephas died the 7th mo. 12th, 1815.

Jonathan, Jr., departed this life 9th day of the 10th mo., 1821.

Deborah departed this life the 20th day of the eleventh month, 1830, between the eleventh and twelfth hour of the day.

Jonathan departed this life the eleventh day of the fifth month, eighteen hundred thirty-three (1833).

MICHENER—Isaac died the 8th mo., 2nd, 1814.

Thomas died 1st mo., 21st, 1815.

Amous died 4th mo., 9th, 1815.

Mary died the 8th mo., 25th, 1816.

Hannah departed this life 8th mo., 2nd, at 8 o'clock in the evening, 1834.

John Michener died 12th of 3rd mo., 1837.

FOULK—Hugh departed this life the 22nd of the third month in the year of our Lord one thousand eight hundred and thirty-one.

CHILD—Jonathan was married to Deborah Michener, 2nd mo., 7th, 1799.

George was married to Sarah Wood, 11th mo., 26th, 1829.

Jonathan, son of Isaac and Rachel, his wife, born 6th mo., 13th, 1761.

Deborah Child, daughter of George Michener and Hannah, his wife, was born 7th mo., 22nd, 1770.

Isaac, son of Jonathan Child and Deborah, his wife, was born 12th mo., 15th, 1799.

George, son of Jonathan and Deborah, his wife, was born 3rd mo., 27th, 1801.

Rachel, daughter of Jonathan and Deborah, his wife, was born 1st day of first month, Anno Domini, 1803.

Randolph, son of George Child and Sarah, his wife, was born 3rd mo., 4th, 1836.

Mary T., daughter of George and Sarah, his wife, was born 12th day of 4th mo., 1838.

WALTER—Joseph B., son of Joan and Mary Beek Walter, of Plumstead, was born the 30th day of August, 1840.

WOOD—Sarah W., daughter of James and Tacy, his wife, was born 7th mo., 30th, eighteen hundred and eleven.

WALTER—Joseph B. (M. D.) of Solebury, was married to Mary T. Child, of Plumstead, Pa., on the 13th of October, 1870, died on the 18th day of August, 1917, aged 76 years, 11 months, 17 days.

CHILD—Jonathan, Jr., died 10th mo., 9th, 1821, aged 14 years, 4 months, 14 days.

Deborah, wife of Jonathan Child, deceased 11th month, 20th, 1830, aged 60 years, 3 months and 29 days.

Jonathan Child, Sr., departed this life 5th month, 12th, 1833, aged 71 years, 10 months, 29 days.

Joshua departed this life 8th mo., 3rd, 1837, aged 27 years.

Israel died 7th mo., 20th, 1884, aged 79 years, 6 months, 4 days.

Randolph departed this life 8th mo., 24th, 1836, aged 5 mos., 20 das.

Sarah W., wife of George Childs, deceased 10th mo., 19th, 1846, aged 35 years, 2 months and 18 days.

George M. died on the 21st day of 4th mo., 1879, aged 78 years, 3 months, 3 days.

CLIFT-JENKINS BIBLE

Presented to the Bucks County Historical Society, by Helen Y. Ellis, May 5, 1927.

CLIFT—Ann, departed this life January 1st, 1863, aged 64 years.

Benjamin K. and Elmira Jenkins were married February 17th, 1853.

Benjamin K. Clift was born March 25th, 1823.

Elmira Clift was born November 9th, 1824.

Emma Clift was born June 29th, 1858.

Departed this life, Benjamin K. Clift, July 9th, 1858, aged 35 yrs., 3 mos., 15 das.

Emma, daughter of Benjamin and Elmira Clift, departed this life April 1, 1903, aged 44 years.

Departed this life August 28, 1911, Emma Clift, aged 87 years, 9 months, 11 days.

JENKINS—Joseph departed this life August 1st, 1852, aged 42 years, 1 month.

HOGELAND—George departed this life February 9th, 1861, in the 46th year of his life.

JONES—Departed this life February 15th, 1861, in the 32nd year of her age.

JENKINS—Jesse departed this life October 23, 1865, aged 77 years, 5 months.

Elizabeth Jenkins departed this life October 28, 1865, aged 45 years and 2 months.

COOPER FAMILY BIBLE

This book is a gift of Amos Cooper to his daughter, Mary Paxson, soon after her marriage.

COOPER—William and Margaret Cooper came from England in the year 1678, and settled near Cooper's Creek, which was named after them, and with them came their four children as here noted:

William Cooper

William—Joseph—Daniel—Hannah Wolston

No. 1—Mary Thackery, John, Hannah.

No. 2—Mary Sloan, Ann Whitall,
John (died young), James,
Sarah Brown, David, Han-
nah, John

No. 3—Martha Allison

No. 4—Amos, Elizabeth Tatum, Paul, Ann
Wood, William.

No. 5

Sibyl Rulon, Mary Paxson, Sarah Webster, Hannah (died young), Joseph (drowned), David (died young), Ann Pancoast, David, Hannah (died young), Isaac, John, Beulah Snowden.

No. 5—Mary Paxson.

Amos Paxson, Josiah Paxson.

Letitia, Hannah, Moses, Beu-
lah, Sarah Ann, Mangelline,
Lewis, Martha, Caroline.

CORNELL BIBLE

Presented to the Bucks County Historical Society in 1916.

CORNELL—In the year 1754, the first day of August is father, Gilliam Cornell, deceased.

In 1724, the 12th day of October, is Gilliam Cornell born and married with Margrita Schenck the 8th day of May in the year 1756—she is born the 10th day of September in the year 1735.

The 17th day of March, 1757, is born Cornelia, bapt. April 11, 1758, the 13th of January is Cornelia deceased.

1758, the 3rd of December, is one Joannes born and baptised December 30th.

1760, the 10th day of May, is Joannes deceased.

1761, the 26th day of May, is Abraham born and baptised June 28th.

1762, the 13th day of September, is Gwillem born and baptised 31st day of October, and the 5th day of February, 1763, is deceased.

1764, 9th day of August, is twins, Gwillem and Lyn Broeder, born; Lyn Broeder is deceased the 11th day and Gwillem is baptised the 27th August.

1766, the 16th of July, is Remmitje born and baptised the 10th of August.

1769, the 17th of April, is one twin, Cornelia, born and is baptised the 12th day of May.

1771, the 13th day of October, Margarita born and baptised 28th day.

1774, the 27th day of May, at 11 o'clock in the night is Jan born and baptised, June 12, by Domini Van Harlangen.

1778, the 16th of June, is Maria born and is baptised June 21 by Domini Schenck.

1785, the 17th day is father Gilliam Cornell deceased and is buried the 19th day of July.

1761, the 26th day May, is Abraham Cornell born and baptised the 28th June and married with Aginitye Bennett the 19th day of September, 1784.

One son, Kindchen, was in the world born July the fifth in the year 1785 but was soon dead.

Son Gilyam is born the 8th of August, 1786.

1788, the 6th of March, is my daughter Margrita born.

1789, November the 6th day is Cornelia born.

1791, July the 1st, is daughter Maria born.

1797, December 23rd, is Abraham born.

Abraham Cornell died the last day of August in the year 1804.

This Bible came in possession of Jane E. Vanartsdalen, wife of Cyrus T. Vanartsdalen, October, 1872, and to their son, I. T. Vanartsdalen, Newtown, Pa., June, 1908.

1793, 15th day of September, is Margrita Cornell deceased, age 21 years and 11 months.

1803, 2nd day of September, at seven o'clock in the morning is Margrita Schenck Cornell deceased in 68th year of her age.

CRESSMAN BIBLE

CRESSMAN—Addison, born June 4th, 1843.

Cathrina H. Rudy, born March 28, 1847. They were married February 18, 1868, by Rev. H. L. Deilgart.

Jonas Clinton, born July 6, 1868.

Percival, born October 1, 1869.

Samuel Often, born March, 1871.

Elizabeth Ann, born August 1st, 1872.

Sally Martha, born July 27th, 1874.

DOYLE BIBLE

Bible belonging to the late Capt. William L. Doyle, grandson of the late Edward Doyle, founder of Doylestown, by the remaining heirs of the family; by Miss Mary C. Doyle, of Philadelphia, Pa.

DOYLE—J. W. Doyle was born January 4th, 1778.

William T. Doyle was born in Doylestown, February 16, 1816.

Catherine Miller Doyle was born in Philadelphia, December 16, 1819.

CHILDREN OF W. T. AND C. M. DOYLE

Mary C. Doyle, born in Philadelphia, October 23, 1838.

Margaretta M. Doyle, September 7, 1840, in Philadelphia.

William W. Doyle, born in Philadelphia, October 21, 1842.

Joseph C., born in Philadelphia, February 23, 1845.

Sarah Lapp, born in Philadelphia, March 26, 1847.

Wilmina T., born in Philadelphia, February 20, 1849.

Adelaide Clawges Doyle, born in Philadelphia, September 21, 1851.

Martha Elizabeth Doyle, born in Philadelphia, April 21, 1856.

Sarah Pamela Doyle, born in Philadelphia, July 4, 1858.

Morgan Thomas Doyle, born in Philadelphia, December 1, 1859.

William T. Doyle and C. M. Clawges were united in the Bonds of Marriage on Sunday evening, the seventeenth day of December, 1837, by Joseph W. Kennard.

W. Watson Doyle died the 27th March, 1901, age 58 years.

Mrs. Catherine M. Doyle, wife of the late Capt. William T. Doyle, died March 12, 1881, in 69th year.

Mrs. Mary Doyle, wife of William, died in Philadelphia, November 26, 1841.

Mrs. Morgan James died in Philadelphia, August 5, 1846.

Sarah Lapp Doyle died in Philadelphia June 15, 1847, buried in lot 620, Monument Cemetery.

Wilhelmina T. Doyle died in Philadelphia, April 26, 1855, age 14 months and 6 days.

Morgan Thomas Doyle died July 4, 1861, interred in lot 620, Monument Cemetery, Philadelphia, Pa.

Martha E. Sturgeon (Doyle) died September 7, 1908, age 54 years.

John W. died May the 3rd, 1857, age 78 years.

Mary M. Clawges died October 14th, 1864, in her 67th year.

William T. Doyle died November 2nd, 1869, in 54th year of his age.

EASTBURN BIBLE

“Rebekah Eastburn’s Book taken at the appraisement of her mother, Mary Eastburn, 1806. 12th month 27th, 1830, gave Peter Phipps, my beloved nephew, this Bible when I have done with it. Rebecca Peirce, formerly Eastburn.”

EASTBURN—Mary, daughter of Samuel Wilson, departed this life the 19th of the eleventh month, 1805, age seventy-three years, one month and seventeen days.

Joseph was born the 18th of the 1st mo., 1730.

Mary Eastburn, his wife, was born the 2nd day of the 10th mo., 1732.

Joseph and Mary were married, the 23rd of 5thth mo., 1753.

Joseph, son of Joseph and Mary, his wife, was born 15th day, 7th mo., 1754.

Benjamin was born the 4th of 7th mo., 1755.

Samuel was born the 20th of 5th mo., 1758.

John was born the 27th of 4th mo., 1760.

Rebecca was born the 4th of 4th mo., 1762.

Thomas was born the 4th of 5th mo., 1764.

Mary was born the 22nd of 5th mo., 1766.

James was born the 27th of 8th mo., 1768.

Amos was born the 25th of 7th mo., 1770.

David was born the 7th of 4th mo., 1773.

Elizabeth was born the 22nd of 4th mo., 1775.

Joseph Eastburn, father of the above children, deceased the 20th of 10th mo., 1780, aged 50 years, 9 months, 10 days.

Mary Eastburn, mother of the above children, deceased the 19th of the 11th mo., 1805, aged 73 years, 1 month and 17 days.

Thomas departed this life the 14th of the 4th mo., 1816, aged 51 years, 10 months, 29 days.

Elizabeth, daughter of Joseph and Mary, his wife, departed this life the second day of the 9th month, 1777, aged 1 year, 4 months, 10 days.

James departed this life the 4th day of 7th mo., 1792, aged near 24 years.

Benjamin departed this life the 30th of the 9th mo., 1806, aged fifty years and almost 3 months.

Joseph Eastburn departed this life the 16th day of 5th mo., 1813, aged 58 years, 10 months.

PHIPPS—Mary departed this life 10th mo., 17th, 1821, aged 55 years, 25 days.

EASTBURN—Samuel departed this life 4th of 5th mo., 1822, aged 63 years, 9 months, 13 days.

Amos, departed this life 10th mo., 16th, 1823, aged 52 years, 9 months, 21 days.

David departed this life 29th day, 6th mo., 1824, aged 53 years, 11 months.

John departed this life 4th mo., 5th, 1843, aged 72 years, 11 months, 1 day.

PEIRCE—Rebecca, departed this life the 9th of 10th mo., 1839, aged 77 years, 6 months and 5 days.

EASTBURN—Elizabeth was born the 7th mo., 21st, 1788.

Bazaleel was born the 8th mo., 14th, 1791.

Jane was born the 5th mo., 22nd, 1794.

John was born the 4th mo., 9th, 1801.

Jane Worstal, late Eastburn, departed this life 11 mo., 6th, 1825.

Elizabeth Eastburn, mother of the above children, departed this life the 6th mo., 3rd, 1801.

John Eastburn, father of the above children, departed this life the 4th mo., 5th, 1833.

John S., son of Bazaleel Eastburn, was born the 1st mo., 29th, 1825.

WILSON—Samuel Senr, born the 6th of 1st mo., 1706.

Rebecca, his wife, born the 16th of 7th mo., 1711.

Thomas, son of Samuel and Rebecca, born 19th of 1st mo., 1721.

Mary, daughter of Samuel and Rebecca, born 2nd of 10th mo., 1732.

Sarah, daughter of Samuel and Rebecca, born 16th of 8th mo., 1734.

Samuel, son of Samuel and Rebecca, born 20th of 10th mo., 1736.

Elizabeth, daughter of Samuel and Rebecca, born 10th of 6th mo., 1739.

Rachel, daughter of Samuel and Rebecca, born 5th of 4th mo., 1741.

Rebecca, daughter of Samuel and Rebecca, born 7th of 6th mo., 1743.

John, son of Samuel and Rebecca, born 5th of 5th mo., 1745.

Hannah, daughter of Samuel and Rebecca, born 2nd of 5th mo., 1747.

Stephen, son of Samuel and Rebecca, born 2nd of 7th mo., 1749.

Oliver, son of Samuel and Rebecca, born 17th of 8th mo., 1751.

David, son of Samuel and Rebecca, born 23rd of 8th mo., 1754.

Isaac, son of Samuel and Rebecca, born 14th of 3rd mo., 1757.

Thomas, son of Samuel and Rebecca, departed this life the 23rd of 7th mo., 1803, aged seventy-two.

Mary Eastburn, daughter of Samuel Wilson, departed this life the 19th of the 11th mo., 1805, aged 73 years, 1 month, 17 days.

Sarah Morris, daughter of Samuel and Rebecca Wilson, departed this life the 23rd of 10th mo., 1809, in 76th year of her age.

Rachel Fell departed this life the 22nd day of the 6th mo., 1814, in the seventy-second year of her age.

Stephen departed this life 4th of 9th mo., 1818.

Elizabeth Ely departed this life the 1st mo., 28th, 1821, aged 81 years, 7 months, 18 days.

John departed this life the 10th mo., 15th, 1821, aged 76 years, 5 months, 10 days.

David departed this life 4th mo., 1825.

Hannah Kirkbride departed this life the 7th mo., 1826.

Isaac departed this life the 5th mo., 1827.

ISAIAH ELY BIBLE

Presented to the Bucks County Historical Society by Helen M. Flitcraft.

BYE—John, son of Thomas and Mary Bye, was born in Buckingham Township, Bucks County, Penna., September 1, 1785.

Hannah Corson, first daughter of Richard and Hannah Corson, was born in the Township of Solebury, County of Bucks, State of Pennsylvania, on the 6th day of May, the third day of the week in the evening in the year of our Lord, 1788.

John Bye died on the 28th of December, 1854; the fifth generation of Byes.

Hannah, wife of John Bye and daughter of Richard and Hannah Corson, died September 5, 1833.

ELY—Isaiah Ely, son of Jonathan and Cynthia, was born in the Township of Solebury, County of Bucks and State of Pennsylvania, the 21st day of April, 1811.

BYE—Mercy W., daughter of John and Hannah Bye, was born in the Township of Buckingham, County of Bucks, State of Pennsylvania, the 26th day of April, 1812.

ELY—Helen Corson, daughter of Isaiah and Mercy W. Ely, was born in Solebury Township, County of Bucks and State of Pennsylvania, the 28th of February, 1857.

FLITCRAFT—Helen Corson Ely, widow of William H. Flitcraft, and daughter of Isaiah and Mercy W. Ely, died in Doylestown, Bucks County, Penna., October 7, 1889.

ELY—Isaiah, died the 12th of June, 1861.

BYE—Mercy W. Ely, daughter of John and Hannah Bye, died in Philadelphia, Penna., 1904.

FLITCRAFT—Helen M., daughter of Helen C. and William H. Flitcraft, born March 14, 1866, at Philadelphia, Penna.

Helen M. Flitcraft, daughter of Helen C. Ely and William H. Flitcraft, died in Philadelphia, Penna., April 4, 1912.

EMIG BIBLE

This Bible and Testament of John George Emig, Haycock Township, Bucks County, was used in the Pulpit of the Reformed Church in Springfield Township for many years. It was presented to the Bucks County Historical Society by Dr. W. H. Meredith.

FOULKE FAMILY BIBLE

FOULKE—Israel was born the 4th of 2nd month, 1760, and died the 27th of the 9th mo., 1824.

Elizabeth Foulke died the 17th of 12th mo., 1831.

William Foulke deceased the 2nd of 9th mo., 1784.

Cadwallader Foulke deceased the 22nd of 8th mo., 1794.

Jane Foulke deceased the 24th of 8th mo., 1794.

Deborah Foulke deceased the 29th of 12th mo., 1806.

Thomas Foulke deceased the 11th of 6th mo., 1832.

Phebe Foulke deceased the 31st of 12th mo., 1838.

David Foulke deceased the 21st of 9th mo., 1878.

Amos Foulke deceased the 27th of 4th mo., 1840.

Hugh Foulke deceased the 3rd of 4th mo., 1853.

Amos R. Foulke deceased the 22nd of 4th mo., 1853.

Barton L. Foulke deceased the 18th of 8th mo., 1856.

Elizabeth R. Foulke deceased the 12th of 5th mo., 1858.

Jane R. Foulke deceased the 25th of 1st mo., 1860.

Franklin Foulke deceased the 18th of 3rd mo., 1860.

The children of Israel and Elizabeth Foulke were born as follows:

FOULKE—William, 18th of 8th mo., 1783.

Thomas, 31st of 12th mo., 1784.

David, 21st of 12th mo., 1786.

Cadwallader, 22nd of 5th mo., 1789.

Jane, the 26th of 3rd mo., 1791.

Hugh, 8th of 9th mo., 1793.

Phebe, 27th of 12th mo., 1795.

Amos, 10th of 8th mo., 1798.

Deborah, 13th of 8th mo., 1800.

GREEN FAMILY BIBLE

GREEN—Benjamin, son of Joseph and Catherine Green, was born the 27th day of the 2nd mo., 1750, O. S.; died the 22nd of 5th mo., 1828.

ROBERTS—Jane, daughter of John and Martha Roberts, was born the 16th of the 4th mo., 1841-1753.

GREEN—William was born the 10th of the 11th mo., 1776; departed this life on the 25th day of the 9th mo., 1851, aged 75 years.

Hannah was born the 29th of the 9th mo., 1778; departed this life the 12th of 4th mo., 1826, aged 48 years; wife of Thomas Lester.

Evan was born the 10th of 11th mo., 1780; departed this life 9th mo., 12th, 1854, aged 74 years.

Benjamin was born 10th of 11th mo., 1782; departed this life 5th of 4th mo., 1837.

Jane was born the 8th of the 2nd mo., 1785; departed this life the 3rd of the 3rd mo., 1835; wife of Caleb Foulke.

James R., was born the 4th of the 3rd mo., 1787; departed this life the 27th of the 7th mo., 1832.

Lydia was born the 20th of the 2nd mo., 1789, and departed this life fully prepared the 26th of 10th mo., 1850.

Joseph was born the 14th of 2nd mo., 1791.

Martha was born 14th of the 2nd mo., 1793; departed this life 17th of 2nd mo., 1836; wife of Jesse, aged 43 years.

John was born the 24th of 3rd mo., 1795; departed this life the 17th of 6th mo., 1797.

Abigail was born the 18th of the 3rd mo., 1797; departed this life 9th mo., 21st, 1854.

GREEN—Benjamin and Jane Roberts were married at Richland Meeting in the year 1775.

William Green, son of Benjamin and Jane Green, was married to Mary Roberts, daughter of Richard and Elizabeth Roberts.

Hannah Green, daughter of Benjamin and Jane, was married to Thomas, son of John and Jane Lester, the 27th of 11th mo., 1805.

GREEN—Evan was married to Isabella, daughter of Amos and Isabella Slaymaker, of Lancaster County, Pa., in the year 1816.

Benjamin, Jr., was married to the daughter of Richard and Elizabeth Roberts—11th mo., 1807.

Jane, Jr., was married to Caleb, son of Everard and Ann Foulke, 26th day of 11th mo., 1807.

James, married to Grace, daughter of Richard and Elizabeth Roberts—5th mo., 1818.

Joseph was married to Meriba, daughter of William and Elizabeth Edwards, 15th day, 10th mo., 1822.

Martha was married to Jesse, son of Richard and Elizabeth Roberts, 9th day of 2nd mo., 1815.

Abigal was married to Samuel Cary, son of Elias and Hannah, 9th day of 9th mo., Plumstead Twp., 1824.

Grace R. departed this life 20th, 5th mo., 1819.

James entered into marriage the 2nd time with Ann Foulke, daughter of John and Letitia Foulke, 1822.

Evan Green and Cynthia Lester were married 2nd, 3rd mo., 1843. He was a widower and she a young widow at that time (now this 1st day of January, 1857, she has been a widow again for some time).

LESTER—Thomas departed this life 22nd of 8th mo., 1826.

Benjamin Green departed this life 20th, 6th mo., 1855.

Evan Green, son of Thomas and Hannah, 20th, 1st mo., 1840.

Isabella, wife of Evan Green, of Columbia, Lancaster Co., died 26th of 11th mo., 1833.

Sarah Ann Cernea, daughter of Thomas and Hannah, departed this life 23rd of 8th mo., 1845.

On the margin near the name of Benjamin Green is written, "My grandfather as well as my great-great-grandfather and an uncle were all named Joseph.

GRIER BIBLE

GRIER—Mary Long died 1845.

TRYON—Mrs. Jane Grier at the home of George Vanarsdale in the 79th year of her age.

GRIER—Anna L. Abington, November 27, 1850 (on leaf of Atlas B No. 27).

HARDMAN BIBLE

HARDMAN—Heinrick was born June 26, 1778, and in the year 1806, the 12th of October, he married Catherine Clemer, who was born in the year 1781, June 7th.

Catherina Hardman died June 9, 1834, aged 53 years, 2 days.

Heinrick died 29th day of May in the year 1864, aged 85 years, 9 months, 3 days.

Catharina Hardman was deceased 11th day of August in the year 1867, aged 44 years, 3 months and 25 days.

Abraham Hardman, son of Heinrick, was born April 27th in the year 1807.

Maria Hardman, daughter of Heinrich, was born the 25th day of November in the year 1808.

Johannes, son of Heinrich, was born the 12th day of July in the year 1810.

Jacob Hardman, son of Heinrich, was born July 3rd in the year 1812.

Susanna, daughter of Heinrich, was born the 31st of October in the year 1813.

Elizabeth, daughter of Heinrich, was born the 2nd day of July in the year 1816.

Heinrick, son of Heinrich, was born the 17th day of October in the year 1817.

Enos, son of Heinrich, was born the 4th day of August in the year 1820.

Catharina, daughter of Heinrich, was born the 16th day of November in the year 1822.

HOUGH BIBLE

HOUGH—Mary departed this life August 5, 1811, aged 73 years.

Joseph departed this life January 6, 1818, aged 86 years.

Lucinda was born July 24, 1790.

Esther was born October 18, 1792.

Richard was born March 1, 1795.

Elizabeth was born May 28, 1797.

Mary was born March 31, 1799.

Thomas was born February 1, 1801.

Hannah was born January 7, 1803.

Pamelia W. died November 16, 1831, aged about 65 years.

Richard T. died February 26, 1835, aged about 75 years.

Robert departed this life July 15, 1845, aged 55 years.

Hannah departed this life December 13, 1858; born February 1, 1801.

Richard departed this life September 13, 1807; born March 1, 1795.

Esther departed this life August 16, 1874, aged 81 years, 9 months, 28 days.

Hannah departed this life March 13, 1875, aged 72 years, 2 months, 6 days.

Mary departed this life August 19, 1881, aged 82 years, 4 months, 19 days.

Elizabeth Pamela, daughter of Robert and Mary Hough, departed this life January 4, 1859; born January 19, 1829.

HOWELL BIBLE

HOWELL—Joseph, son of David and Mary Howell, was born the 3rd day of O. S. 1729.

Jemime, wife of Joseph Howell, and daughter of John and Elizabeth Burroughs, was born the 15th day of the 2nd mo. called February, 1725 O. S.

Samuel, son of Joseph and Jemime Howell, was born the 6th day of the 12th mo. called December, Anno. 1754.

Elizabeth, daughter of Joseph and Jemime, was born the 7th day of 1st mo. called January, 1756 N. S.

Mary Howell, daughter of Joseph and Jemime, was born the 7th day of the 1st mo. called January, N. S. 1756.

David, son of Joseph and Jemime, born the 4th day of the 11th mo., November, 1757 N. S.

Phoebe, daughter of Joseph and Jemime, his wife, was born the 22nd of the 8th mo., called August, N. S. 1759.

Timothy, son of Joseph and Jemime, was born the 7th of the 8th mo., called August, 1761 N. S.

Martha, daughter of Joseph and Jemime, born the 5th day of the 7th mo. called July, Anno Dom. 1763.

Jemime, daughter of Joseph and Jemime, was born the 9th day of 2nd mo., called February, 1765 N. S.

Susanna, daughter of Joseph and Jemime, born the 25th day of the 12th mo., called December, 1766 N. S.

Hulda Ann was born June 12, 1822.

Susanna was born April 1, 1824.

Phebe was born October 15, 1826.

Lettica was born January 21, 1829.

Charles Heuston was born June 21, 1831.

Theodore was born March 5, 1834.

Samuel was born August 2, 1836.

Samuel departed this life the 18th day of September, 1837.

Joanna departed this life January 22, 1870, in the 68th year of her age.

Hulda Ann, Susanna, Phebe, Lettica, Charles Heuston, Theodore, and Samuel are the children of Samuel Howell and Joanna Howell.

Joanna Howell, wife of Samuel, and daughter of Garrett and Hulda Johnson.

Jemime, wife of Joseph Howell, departed this life February 15, 1825.

Theodore Howell died February 13, 1916.

Samuel, son of David and Susanna, was born May 26, 1794.

Charles, son of David and Susanna, was born February 23, 1796.

Elizabeth, daughter of David and Susanna, was born February 23, 1798.

More, son of David and Susanna, was born May 2, 1800.

Phebe, daughter of David and Susanna, was born January 2, 1803.

Joseph, son of David and Susanna, was born September 19, 1806.

JENKS FAMILY BIBLE

JENKS—Dr. Phineas married to Eliza Farmer Murray, daughter of Gen. Francis Murray, on the 20th of March, 1806.

Dr. Phineas was married to Amelia Snyder, daughter of Simon Snyder, Governor of the Commonwealth, on the 28th of March, 1820.

ELSEGOOD—Rev. Joseph G. and Elizabeth Mary Jenks, daughter of Phineas and Amelia Jenks, were married October 1, 1846.

JENKS—Dr. P. Frederick Jenks and Eliza J. Hutchinson were married March, 1853.

George A. Jenks, Esq., to Ellen, daughter of Jesse Davis, Esq., June 15, 1860.

ELSEGOOD—Amelia Snyder Jenks to Clarence Franklin Colzer of East New York, December 1, 1870.

JENKS—Eliza Farmer died March 16, 1807, aged 23 years and 1 month.

Eliza Farmer Murray Jenks died August 16, 1807, aged 5 months, 9 days.

Frederick Augustus Jenks died August 22, 1828, aged 5 weeks, 6 days.

Henry Laurens died July 9, 1830, aged 9 months.

Phineas (M. D.) died August 6, 1851, in the 71st year of his age.

William Wallace died July 20, 1857, in the 32nd year of his age.

Mrs. Amelia, widow of Dr. Phineas Jenks, died August 6, 1859, in the 69th year of her age.

Sylvania, daughter of George A. and Ellen D., died April 14, 1861, aged 3 days.

Phillip Frederick (M. D.) of the 1st Missouri Light Artillery, died in U. S. Hospital, St. Louis, Mo., January 9, 1863.

Elizabeth Mary, daughter of George A. and Ellen D., died July 12, 1867, aged 47 years, 11 months, 21 days.

ELSEGOOD—Phineas Augustus Jenks died March 12, 1877, in East New York, L. I., aged 21 years, 5 months, 2 days.

At Trinity Church Rectory, East New York, L. I., May 31, 1884, Rev. Joseph Isaac Elsegood, aged 67 years, 11 months, 25 days.

COLYER—Amelia Jenks, wife of C. F. Colyer, died June 28, 1885, at East New York, L. I.

JENKS—Eliza Farmer Murray, born March 7, 1807, daughter of Phineas and Eliza F. Jenks.

Elizabeth Mary Jenks, daughter of Phineas and Amelia, born July 29, 1822.

Simon Snyder, son of Phineas and Amelia, born April 18, 1824.

William Wallace, son of Phineas and Amelia, born November 2, 1825.

Frederick Augustus, son of Phineas and Amelia, born July 12, 1828.

Henry Laurens and George Antes, twins of Phineas and Amelia, born October 9, 1829.

Phillip Frederick, son of Phineas and Amelia, born February 27, 1832.

Amelia Snyder, daughter of Dr. Frederick and E. J., born June 15, 1854.

Phineas Augustus, son of Dr. P. F. and E. J., born October 10, 1855.

Sylvania Penn, daughter of George A. and Ellen D., born April 10, 1861.

Elizabeth Mary, daughter of Thomas A. and Ellen D., born

in the old homestead in Newtown, Bucks County, in same room in which her father was born, July 22, 1862.

CORZER—Florence Amelia, daughter of Clarence Franklin and Amelia Snyder Jenks, born in East New York, April 4, 1872.

Clarence Franklin, second child of Clarence Franklin and Amelia Snyder Jenks Corzer, born in East New York, October 25, 1874.

Elizabeth Elsegood, third child of Clarence Franklin and Amelia Snyder Jenks, born at East New York, November 14, 1875.

GEORGE KELLY FAMILY BIBLE

Maria Arnel's book, presented by Elizabeth Kelly, September 18, 1845.

KELLY—George departed this life November 6, 1793.

George Blackford Kelly departed this life, February 13, 1813.

Temperance Coates (late Kelly) departed this life August 6, 1826.

Moses departed this life January 5, 1829.

Phineas and Martha Jopson were joined in marriage on the 16th day of March, 1806, before John McMasters, Esq., in Upper Makefield Township, Bucks County, Pa.

Phineas Kelly and Beulah Johnson were joined in marriage on the 22nd day of January, 1818, before Isaac Hicks, Esq., in Newtown, Bucks County, Pa.

ARNEL—William and Maria Kelly were joined in marriage on the 27th day of December, 1838, before Peter Gwinner, Esq., in Newtown, Bucks County.

KELLY—Moses Jopson and Elizabeth Riggs were joined in marriage on the 11th day of November, 1841, before the Rev. William J. Patterson at Brookville, Franklin County, Indiana.

SWARTZ—William H. and Martha K. Arnel were joined in marriage on the 26th day of November, 1863, before the Rev. W. S. Wood at Hatboro, Montgomery Co., Pa.

Harry A. and Jennie L. Ryan were joined in marriage on the 8th day of April, 1893, by the Rev. D. H. Turner at Hartsville, Bucks County, Pa.

Mary Ann, daughter of Phineas and Martha, born May 2, 1807.

Moses Jopson, son of Phineas and Martha, born July 31, 1810.

Maria, daughter of Phineas and Martha, born August 2, 1813.

ARNEL—Phineas Kelly Arnel, son of William and Maria, born November 29, 1839.

Martha Kelly, daughter of William and Maria Arnel, born January 1, 1842.

Maria Arnel, daughter of Moses J. and Elizabeth Kelly, born October 11, 1842.

Harriett Arnel, daughter of Moses J. and Elizabeth Kelly, born July 4, 1844.

Harrie J. A., son of William H. and Martha K. Swartz, born March 18, 1865.

William Swartz, son of George and Mary, born April 9, 1804.

SWARTZ—William H., son of Jesse and Catherine Mattis, born October 19, 1840.

RYAN—Jennie L., daughter of Isaac and Anna Eliza, born October 8, 1867.

KELLY—Mary Ann died March 15, 1809.

Martha, wife of Phineas, died April 29, 1816.

ARNEL—Phineas Kelly died January 4, 1840.

William died September 22, 1841.

Phineas died March 28, 1861.

Beulah, wife of Phineas, died December 1, 1861.

SWARTZ—Harrie, only child of William H. and Martha K., died June 13, 1898.

ARNEL—Maria Kelly, wife of the late William Arnel, died October 23, 1898.

SWARTZ—William H. died August 14, 1908.

Martha K. died February 2, 1921.

In this Bible are newspaper clippings as follows:

TERRY—On September 15, 1886, Nancy J., wife of Robert B. Terry, and daughter of Giles B. and Mary R. Jamison, in her 41st year.

WORTHINGTON—Margaret Ann, wife of B. C. Worthington.

On the 15th inst., Blackford C. Worthington in the 57th year of age.

LEWIS—In Buckingham, October 17, 1880, Sarah, wife of John G. Lewis, aged 32 years.

SIMPSON—In Philadelphia, Pa., 8th mo.-16-1904, Julia M.,

widow of the late William N. Simpson, aged 75 years. Funeral from Wrightstown Friends Meeting House, 8th mo.-19th.

THOMAS—In Forrest Grove, 4th mo.-12-1882, at the residence of her son-in-law, Eleazer Doan, Amy Thomas, aged 88 years, 11 months.

AIKIN—On February 10, 1897, Catherine, widow of James W. Aikin, at her residence, 2121 Christian Street. Interment, Mt. Moriah Cemetery.

ARNOLD—On February 11, 1897, Franklin, son of the late Thomas and Hannah Arnold, in the 49th year of his age, at the residence of his uncle, Mr. John T. Atkinson, 1018 Wallace Street. Interment, Neshaminy Cemetery, Bucks County.

ELY—Sarah died on the 27th inst., aged 74 years, at her residence, 859 N. Seventh Street, Philadelphia. Interment, Fairhill Cemetery.

COWGILL—At the Presbyterian Home for Aged Couples, Bala, Pa., March 11, 1913, Caroline, wife of the late John Cowgill, aged 82 years. Interment, Northwood Cemetery.

WOOD—Rev. W. Shadrack Wood, of Mt. Pleasant, Westmoreland County, died April 1st, the deceased was 67 years of age. He was a son of Rev. William Wood, a pioneer in the Baptist Church in the western part of the state. He organized the first Baptist Church in Doylestown, and was previously pastor of the Hatboro Church. He leaves a widow, one daughter and two sons.

CORNELL—In Newtown, March 25, 1882, at the residence of her son-in-law, Franklin Cornell, Sarah Earle, in the 71st year of her age.

“What man is there on earth with wit or skill
To stem the tide of a woman's will?
For if she will, she will, you may depend on't,
And if she won't she won't, and there's an end on't.”

PHINEAS KELLY BIBLE

KELLY—Married this 22nd of January, 1818, before Isaac Hicks, Esq., Phineas Kelly of Solebury Township, and Beulah Johnson of Buckingham, in the presence of Mary Cary, Mary Seigfried, Sarah Ann Willard, Samuel West, Simeon Seigfried and Livia Festerle.

Beulah, daughter of Phineas and Beulah, was born December 8, 1818, and was interred in the Presbyterian Burying Ground at Solebury the 9th of the same.

Phineas Kelly, son of Phineas and Beulah, born October 24, 1820, and was buried 24th of same at Presbyterian grave yard in Solebury.

In this Bible are duplicated the records contained in the Kelly Bible previously recorded, also the following:

KELLY—George departed this life November 6, 1793.

George B. departed this life February 13, 1813.

Temperance Coates late Temperance Kelly departed this life the 6th day of August, 1826.

Moses Kelly departed this life January 5, 1829.

PEARSON—Mary Kelly departed this life February 6, 1857.

Nancy Kelly departed this life April 6, 1841.

Benjamin departed this life, October 23, 1853.

ISAAC KIRK BIBLE

KIRK—Isaac, son of William and Mary, was born the 16th of 2nd mo., 1783.

Martha, wife of Isaac Kirk, was born the 25th of 5th mo., 1788.

Letitia, daughter of Isaac and Martha Kirk, was born 1st day, 7th mo., 1807.

Miranda was born 17th, 12th mo., 1809.

William was born 13th, 11th mo., 1813.

Caroline was born 13th, 8th mo., 1818.

Lydia was born 3rd, 6th mo., 1821.

Caroline, daughter of Isaac and Martha, died 4-30-1819.

Letitia departed this life 30th, 10th mo., 1828.

Miranda departed this life 29th of 11th mo., 1833.

Isaac Kirk departed this life January 27, 1845.

Martha Kirk departed this life April 19, 1873, aged 84 years, 10 months.

Lydia Kirk departed this life December 11, 1885, aged 64 years, 6 months, 8 days.

William Kirk departed this life February 24, 1904, aged 90 years, 9 months, 2 days.

MERRICK—Hannah, born December 6, 1770; died September 8, 1854, aged 83 years, 9 months, 2 days.

KROESEN FAMILY BIBLE

KROESEN—Garrett (son of John Kroesen and Jane, his wife) was born September 9, 1759.

Caty, daughter of Thomas Craven and Ellen, his wife, was born September 24, 1754.

Sarah, daughter of Garrett and Caty, his wife, born May 18, 1782.

Leanah, daughter of Garrett and Caty, his wife, born June 10, 1784.

Jane, daughter of Garrett and Caty, his wife, born June 2, 1786.

Edith, daughter of Garrett and Caty, his wife, born July 20, 1788.

Margaret, daughter of Garrett and Caty, his wife, born October 11, 1790.

John, son of Garrett and Caty, his wife, born May 14, 1796.

Catherine Kroesen deceased on the twenty-eighth of June, one thousand eight hundred and eleven, in fifty-seventh year of her age.

KRUSEN FAMILY BIBLE

KRUSEN—David and Juliann McKinstry were joined in the bond of matrimony December 2nd, in the year of our Lord, 1830.

Juliann departed this life February 17, 1849.

LARGE FAMILY BIBLE

Presented to the Bucks County Historical Society by Miss Anna Smith of Newtown, August 1, 1929.

LARGE—Ebenezer, son of Jacob and Mary Bunting Large, of Kingwood in County of Hunterdon, New Jersey, and Hannah Knowles, daughter of John and Mary Knowles, of Upper Makefield in County of Bucks, State of Pennsylvania, were married twenty-first day of 10th month, 1790, at Falls, Bucks County, Pennsylvania, in Public Meeting at Falls, Bucks County.

Joseph married Cynthia Scarborough, had seven children.

Isaiah married 1st Maria Katz, had three children; 2nd Sarah Katz, had five children.

Anna married Stephen S. Kirk, of Forrest Grove, no children.

Samuel married Mary Hartley Carver, widow of Isaiah. She had two daughters and a son by first marriage.

KNOWLES—John married Eliza Hall; had eight children.

LARGE—Jacob, son of Ebenezer and Hannah Large, was born the 27th day of the 8th month, 1791, and departed this life 10th day of twelfth month, 1791.

Mary Large, daughter of Ebenezer and Hannah, was born the 24th day of 10th month, 1792, and departed this life 11th of 2nd mo., 1793.

William, son of Ebenezer and Hannah, was born 3rd month 21st, 1794; died 8th mo., 23rd, 1794.

Joseph Knowles, son of Ebenezer and Hannah, was born on 11th mo., 13th, 1795, died April 25, 1870, aged 75 years.

Isaiah Paxson, son of Ebenezer and Hannah, born 10th mo., 23rd, 1797, and died 10th mo., 1st, 1866.

Anna, daughter of Ebenezer and Hannah, born 3rd mo., 27th, 1801, died 7th mo., 7th, 1870.

Samuel, son of Ebenezer and Hannah, born 1st mo., 1804.

John Knowles, son of Ebenezer and Hannah, born 10th mo., 12th, 1810; died 9th mo., 9th, 1879.

LARUE BIBLE

LARUE—Isaac.

COOPER—Ruth M., married August 12, 1824.

KEEN—Jonathan P.

LARUE—Martha B., married December 31, 1848.

LARUE—Thomas B.

REED—Margaret, married October 21, 1849.

BUZBY—Thomas.

LARUE—Mary F.

RAYLMAN—Spencer.

LARUE—Sarah A.

BURROUGHS—William.

LARUE—Emmaline G.

LARUE—Joseph R.

JOHNSON—Lottie.

LARUE—Isaac, born May 16, 1800.

Ruth M., born May 15, 1804.

Martha B., born June 4, 1825.

Abraham D., born April 19, 1827.

Thomas B., born June 13, 1828.

Mary F., born February 12, 1830.
 Sarah Ann, born June 5, 1833.
 Joseph R., born June 19, 1835.
 Emaline G., born February 9, 1838.
 Eliza Ann, born December 16, 1839.
 Emanuel G., born March 25, 1842.
 Margaret E., born February 27, 1847.
 Ruth Ann, born February 3, 1850.
 Rebecca Ann McMillan, born October 31, 1842.
 Ruth M., died August 29, 1864.
 Abraham D., died April 19, 1827.

MARTINDELL-BRIDGMAN BIBLE

Mary Bridgman, Her Book, October ye 15th, Anno Domini, 1705, in the eighteenth year of her age.

MARTINDELL—John Sen'r born 24th day of August, A. D. 1676.

My son, William, was born October the 2nd, 1707.

My son, Thomas, was born September 24, 1708.

Ann born November 16, 1709.

Mary born 12th mo. 22nd, 1711.

Alesbuthe was born the 6th day 7th mo., 1715.

——— was born about 5 o'clock in morning, ye year 1717.

My son, ———, was born August 30, 1723.

Joseph born June 20, 1747.

John, son of John and Mary, born December 15, 1749.

William, son of John and Mary, born August 3, 175-.

Rachel Martindell, daughter of John and Mary, born October, 1752.

Sarah, daughter of John and Mary, October 13, 1754.

———, June 21, 1757.

Strickland was born June 19, 1759 (?).

Isaac, son of John and Mary, December 21, 1767.

Amos, son of John Martindell, August 10, 1757.

Miles, son of John and Mary, June 2, 1759.

Rachel departed this life the 21st day of January and was buried 22nd in the year of our Lord 1745 (?), aged 20 years.

MOORE FAMILY BIBLE

Printed by John Baskett, Oxford, printer to the University,
MDCCXXVIII.

MOORE—Sarah was born the 18th day of the 9th mo., 1732.

Thomas was born the 6th day of the 10th mo., 1735.

Elizabeth was born the 19th day of the 10th mo., 1738.

Rachel was born the 17th day of the 5th mo., 1741.

Ann was born the 16th day of the 2nd mo., 1744.

John was born the 30th day of the 8th mo., 1746.

Mary was born the 28th day of the 9th mo., 1754.

Walter was born the 22nd day of February in the year 1693,
died 8th mo., 1782.

HERBERT—Ann was born the 11th of 9th mo., 1710, died
11th day of 11th mo., 1783.

Thomas was born in year 1768, departed this life in 23rd year
of his age.

MOORE—Violetta, daughter of John and Charlotte Moore,
was born May 27th, 1808.

Daniel Thomas Moore, son of John and Charlotte, born
March 1, 1810.

Hamilton, son of John and Charlotte Moore, born April 5,
1817.

Sarah Thomas Moore, daughter of John and Charlotte, born
December 3, 1818.

Lavinia Thomas Moore, daughter of John and Charlotte,
born June 6, 1821.

Sarah Thomas Moore, daughter of John and Charlotte, died
December 8, 1819.

Lavinia Thomas Moore, daughter of John and Charlotte,
died April 12, 1822.

Hamilton Moore, son of John and Charlotte, died September
5th, 1822.

Charlotte Moore, wife of John Moore, and daughter of Daniel
and Sarah Thomas, died July 13, 1823, aged 39 years, 7 months,
20 days.

Violetta Moore, daughter of John and Charlotte, died April
10, 1826.

John Moore, son of John and Phebe Moore, died April 17th,
1830, aged 51 years, 17 days.

John Moore, son of Walter and Ann Moore, born 26th day, 8th mo., 1746.

Phebe Dyer, daughter of Josiah and Hester Dyer, born 20th day, 2nd mo., 1748.

Elizabeth Moore, daughter of John and Phebe Moore, born 5th day, 3d mo., 1787.

Ann, daughter of John and Phebe, born 20th day, 2nd mo., 1769.

Rachel, daughter of John and Phebe, born 9th day, 3rd mo., 1771.

Susannah, daughter of John and Phebe, born 1st day, 4th mo., 1773.

John, son of John and Phebe, born 31st day, 3rd mo., 1779.

Mary, daughter of John and Phebe, born 6th day, 3rd mo., 1781.

James, son of John and Phebe, born 26th day, 2nd mo., 1783.

Joseph, son of John and Phebe, born 15th day, 8th mo., 1785.

Esther, daughter of John and Phebe, born 31st day, 5th mo., 1789.

(In this Bible is recorded) "In the year of our Lord 1766, the Locusts came by thusans by millions and by tens of thousands of millions, outnumberable. JOHN MOORE."

JAMISON—This certifies that on the twenty-eighth day of February in the year 1893 John Jamison and Louisa M. Moore were by me united in marriage at Brooklyn, New York, by Howard S. Bliss, Asst. Pastor, Plymouth Church.

John Jamison died November 30, 1914.

MORRIS BIBLE

Presented to the Bucks County Historical Society by Eli C. Trumbower, of Wilmington, Del., September, 1922.

MORRIS—James was born September 4th, 1763.

Ann was born December 4, 1766.

Rachel, daughter of James and Ann, was born October 1, 1788.

John was born October 5, 1790.

Abraham was born September 11, 1792.

Martha was born February 11, 1795.

Daniel was born February 5, 1798.

Mary was born March 27, 1800.

Jahu was born August 26, 1802.

Lydia Ann was born January 1, 1809 (first day of the year, first hour of the day, first hour of Fullmoon).

James, son of John and Margaret, born September 1, 1820.

George was born February 26, 1822.

Ann Elizabeth was born October 7, 1824.

Martha was born September 26, 1826.

Abraham was born October 28, 1829.

Eli G. was born August 5, 1835.

James departed this life October 17, 1837, aged 74 years.

Ann departed this life February 18, 1843, in the 78th year of age.

Martha departed this life 10th of 10th mo., 1819.

Mary departed this life 23rd of 10th mo., 1819.

Rachel Cadwallader, daughter of James and Ann, departed this life 2nd of 9th mo., 1860, aged 71 years, 11 months, 2 days.

OBERHOLTZER BIBLE

This Bible was printed by Christoph Saur in 1743 and is in German. It was presented to the Bucks County Historical Society by Dr. Henry C. Mercer.

OBERHOLTZER—Heinrich was deceased the 26th of October, 1815.

February 18th, 1820, is Barbara Oberholtzer born.

October, 1830, is ——— Oberholtzer born.

Johannes Oberholtzer is born in year Christ, 1803, the 31st day of October; Abraham Craut do write this.

PORCH FAMILY BIBLE

Mary Porch, August 17, 1723.

Almiry Porish, born September 6th, 1814.

Rebecca Porch was born October the 22nd, 1773.

Joel Porch was born June 12, 1795.

Moses Porch was born the 20th of January, 1820.

Samuel Porch was born the 6th of November, 1826.

Rebecca was born February 18, 1829.

Ciry B. Porch was born December 23, 1831.

Mary Porch was born August 17, 1793.

Mary Porch departed this life January the 24th, 1822.

Susannah Porch departed this life August, 1824.

Joel Porch and Mary, his wife, ——— August 5, 1820.

ROE FAMILY BIBLE

ROE—F. A., born October 4, 1823, in the town of Elmira, New York.

Eliza J. (nee Snyder), born January 27, 1825, in the town of Charlestown, Jefferson County, Virginia.

Fayette W., born August 7th, 1850, at estate of "Oak Grove," Frederick County, Virginia, two miles from Brucetown, Va.

SUSANNA B. SHAW BIBLE

Susanna B. Shaw, born 1786, died 1869, aged 83 years.

Presented by her son, Amos, A. D. 1845, Baltimore, Maryland.

SAMUEL EASTBURN BIBLE

Shalcross, James, departed this life the 9th day of December, 1821, aged 23 years and 8 months.

Shalcross, Joseph, Jr., departed this life January 6th, 1823, aged 30 years, 6 months.

John Eastburn departed this life 4th of 3rd mo., 1833, aged 73 years.

CANBY SMITH BIBLE

Presented to the Bucks County Historical Society August 1, 1929, by Miss Anna Smith of Newtown.

SMITH—Canby and Rachel Hellings were married November 29th in the year of our Lord one thousand eight hundred and thirty-two (1832).

BUCKMAN—Frank and Rachel E. Smith were married January 16th in the year of our Lord one thousand eight hundred and sixty-eight (1868).

Howard S., son of Frank and Rachel, his wife, was born in the year of our Lord one thousand eight hundred and sixty-eight, June 20th (1868).

Anna Mary, daughter of Frank and Rachel, his wife, born October 16th, 1869.

SMITH—Canby, son of Robert Smith and Mary, his wife, was born August 29th, in the year of our Lord one thousand eight hundred and eight (1808).

Rachel Hellings, daughter of Tunis Hellings and Rachel, his wife, was born October 14th in the year of our Lord one thousand eight hundred and six (1806).

Edward H., son of Canby and Rachel, was born October 9th in the year of our Lord one thousand eight hundred and thirty-four (1834).

Mary Emily, daughter of Canby and Rachel, was born February 8th in the year of our Lord one thousand eight hundred and thirty-seven.

Thomas James, son of Canby and Rachel, was born December 14th in the year one thousand eight hundred and thirty-eight (1838).

Charles Stanly, son of Canby and Rachel, was born November 16th in the year of our Lord one thousand eight hundred and forty (1840).

Nathan H., son of Canby and Rachel, was born December 18, in the year of our Lord one thousand eight hundred and forty-two.

Rachel Elizabeth, daughter of Canby and Rachel, was born May 19th in the year of our Lord one thousand eight hundred and forty-five (1845).

Howard, son of Canby and Rachel, was born September 12, in the year of our Lord one thousand eight hundred and forty-eight (1848).

SMITH—Canby died on the twenty-seventh day of June in the year of our Lord one thousand eight hundred and sixty-seven (1867).

Rachel died December 25th in the year of our Lord one thousand eight hundred and ninety (December 25, 1890).

Edward H. died January 4th, 1888.

Howard died July 15th, 1903.

Thomas J. died September 11th, 1905.

Nathan H. died September 3rd, 1909.

BUCKMAN—Rachel E. died September 24th, 1905.

SCROGGINS SMITH BIBLE

SMITH—Scroggins, married 5th of September, 1810, and Rachel, his wife, by John Frost, Salem County, N. J.

Salem County, State of New Jersey, in the year of our Lord 1810, Scroggins Smith and Rachel Smith, the daughter of Samuel Smith and Sarah, his wife, were joined in the bonds of matrimony.

Scroggins, the son of Scroggins and Rachel, his wife, was born August 28, 1812.

Willem, the son of Scroggins and Rachel, his wife, August 3—at 4 o'clock and five minutes in the afternoon, it being the fourth day of the week in the year of our Lord 1811.

Sarah, the daughter of Scroggins and Rachel, his wife, was born May 12th in the year of our Lord 1813, being the 4th day of the week.

Mary, daughter of Scroggins and Rachel, his wife, born October 22, in the year of our Lord 1814.

Willem, son of Scroggins and Rachel, his wife, was born April 10th in the year of our Lord 1817.

Sarah Ann, the daughter of Scroggins and Rachel, his wife, born May 27th in the year of our Lord 1819.

Willem departed this life September the 11th at 4 o'clock and 3 minutes in the morning in the year of our Lord 1811.

Sarah, the daughter of Scroggins and Rachel, his wife, departed this life May 26th, 1813.

Mary, daughter of Scroggins and Rachel, his wife, departed this life, September 10, 1815, aged 1 year, 11 months.

Rachel, the wife of Scroggins, departed this life February (1821) ?, aged 26 years, 15 days.

SUMMERS A. SMITH BIBLE

OTT—Samuel Ott and Elizabeth Summer married June 13, 1824, by Johan Steer, Prediger.

SMITH—Summers A. and Leah M. Drissel were married June 22, 1851. Summers was born May 13, 1833, son of Aaron and his consort by birth Summers.

DRISSEL—Leah M. was born February 29, 1833, daughter of Abraham Drissel and his consort Rachel by birth a Mill, died August 16, 1895.

SMITH—Emma born January 24, 1853.

Ann Elizabeth born June 5, 1856, died December 15, 1857.

OTT—Elizabeth born February 26, 1797.

Samuel died July 16, 1855, aged 57 years, 9 months, 20 days.

SUMMERS—Henry, aged 19 years, died December 18, 1861.

Isaac died September 23, 1874, aged 67 years, 5 months.

OTT—Elizabeth died November 7, 1885.

WOLFINGER—Catherine died November 25, 1861, aged 58 years.

WILLIAM SMITH BIBLE

This Bible originally belonged to William Smith, who came from Yorkshire, England, in 1684, and settled at Wrightstown, Bucks County, Pennsylvania.

He married Mary Croasdale, daughter of Thomas and Agnes Croasdale, who came from England in the good ship "Welcome" in 1682.

Their daughter, Margaret, married Enoch Pearson, son of Thomas and Grace Pearson, of Lancaster, England, at the house of Stephen Twining, Middletown, in 1712.

William Smith married the second time Marcy—in 1721, and died 1743. In his last Will, dated 30th, 10th mo., 1740, he gave his great Bible to my daughter, Mary Pearson, during her natural life and then to her daughter, Mary Pearson.

Mary Pearson married John Hulme, son of George and Ruth (Palmer) Hulme in 1744, and was the father of John and George Hulme. John Hulme married Rebecca Milnor at Falsington, Bucks County, 5th mo., 30th, 1770. His father died at his house and the Bible remained in the family of his daughter, who married George Harrison, to whose children, Samuel Hulme, Harrison and Edmund G. Harrison, the Bible descended.

(Written by Mary S. Price, great-granddaughter of John and Mary (Pearson) Price.

SMITH—Joseph, son of William and Marcy, was born the first day of January about the year of our Lord 1721-22.

John, son of William and Marcy, was born the fifteenth day of January between one and two o'clock in the evening in the year of our Lord 1723-4.

Ralph, son of William and Marcy, was born the twenty-eighth day of October, between two and three in the evening in the year of our Lord 1725.

Esther, daughter of William and Marcy, born ye eleventh day of November about sunfall in the year of our Lord, 1727.

Elizabeth, daughter of William and Marcy, was born ye tenth day of September in the year of our Lord 1730.

Samuel, son of William and Marcy, his wife, was born October ye 23, 1733, about eleven o'clock at night.

David Smith, son of William and Marcy, his wife, was born April ye 25th day about 12 o'clock, Anno Domini 173—.

HULME—Rachel, daughter of John Hulme and Mary, his wife, was born the 11th day of April about 10 o'clock in the evening, 1745.

John Hulme, son of John and Mary, his wife, was born the third day of June about five o'clock in the afternoon, 1747.

Mary, daughter of John and Mary, his wife, was born the thirty-first of August about nine o'clock in the morning, 1748.

George Hulme, son of John and Mary, his wife, was born the twenty-fifth of February in the year of our Lord, 1750.

William, son of John and Mary, his wife, was born the eighteenth day of February about four o'clock in the afternoon.

Thomas, son of John and Mary, his wife, was born the twenty-eighth day of January, 1755.

Margaret, daughter of John and Mary, his wife, was born the twenty-sixth day of August, 1757.

Ruth, daughter of John and Elizabeth, his second wife, was born the twenty-third of September in the year of our Lord one thousand and seventy-one (1771).

Thomas, son of John and Elizabeth, his wife, was born on the twentieth day of June in the year of our Lord 1774.

Benjamin, son of John and Elizabeth, his wife, was born the fourth day of February in the year of our Lord, 1778.

SOUDER BIBLE

SOUDER—Charles died May 30, 1817, aged 44 years.

Susannah, wife of Charles, died July 30, 1816, aged 42 years, married August 20th, 1795, by William Rodgers, D. D.

John Jarvis, son of Charles and Susannah, was born September 3, 1796.

Elizabeth, daughter of Charles and Susannah, born July 31, 1806 (Philadelphia).

Rebecca Monington, daughter of Charles and Susannah, born December 24, 1809.

Sarah Monington, daughter of Charles and Susannah, born December 28, 1812.

JACKSON—Jesse A., oldest child of George and Sarah M., born May 15, 1839, at Willingboro, N. J.

William V., 2nd child of George and Sarah M., born November 2, 1840, Eddington, Pa.

Frederick B., 3rd child of George and Sarah M., born December 8, 1842, Eddington, Pa.

George Baird, 4th child of George and Sarah M., born October 2, 1844, Eddington, Pa.

Susanna, 5th child of George and Sarah M., born October 23, 1846, Eddington, Pa.

Christina, 6th child of George and Sarah M., born October 12, 1848, Eddington, Pa.

Joseph Charles, 7th child of George and Sarah M., born November 7, 1851, Eddington, Pa.

Charles Edward, 8th child of George and Sarah M., born November 13, 1855, Eddington, Pa.

George departed this life December 13, 1872, in 69th year of age.

Joseph Charles died November 20, 1888, aged 37 years, 2 months, 13 days.

William V. died December 6, 1889, aged 49 years.

Frederick B. died March 4, 1892 in 49th year.

George Baird died March 16, 1897, in 53rd year.

Sarah M. died February 21, 1905, in 93rd year.

Charles E. died January 30, 1907, in 52nd year.

STOVER BIBLE

STOVER—Julia Ann died March 12, 1887, in the 84th year of her age.

Lewis Stover was born October 13, 1822, died April 27th inst., at 522 Walnut Street, Philadelphia, aged 82 years. He was a bachelor survived by a brother and sister, Albert and Clare Stover, who reside at Kintnersville, Pa. He was the son of Jacob and Sarah Treichler Stover.

STRICKLAND-BENNETT BIBLE

STRICKLAND—Miles was born March 12th, 1730, died April 13, 1823.

Phoebe was born in the year 1731.

Sarah, daughter of Miles and Phoebe, was born the 2nd day of June, 1761.

Mary, daughter of Miles and Phoebe, was born March 31, 1763.

Ann, daughter of Miles and Phoebe, was born November 19, 1765.

Joseph, son of Miles and Phoebe, was born July 2, 1767.

Amos, son of Miles and Phoebe, was born February 5, 1773.

BENNETT—John and Sarah Strickland married November 27, 1782.

Miles born August 20th, 1783.

Arthur born July 10, 1785.

Arthur born December 22nd, 1786.

Amos born March 15, 1789.

Joseph born January 26, 1791.

Phebe born March 6, 1793.

John born March 12, 1795.

Matthew born May 11, 1797.

Strickland born April 27, 1799.

Mary born April 3, 1801.

John born February 7, 1758.

Sarah Bennett, his wife, born June 2, 1761.

Mahlon D., son of Mary, born February 3, 1826, died July 10, 1835.

Arthur, son of John and Sarah, deceased April 25, 1786, aged 9 months.

Joseph, son of John and Sarah, deceased April 1, 1814, aged 23 years, 2 months, 5 days.

John died July 26, 1836, aged 78 years, 5 months, 19 days.

Arthur, son of John and Sarah, died March 12, 1837, the third son of John and Sarah, aged 50 years, 2 months, 20 days.

Miles departed this life 3rd mo., 2nd, 1840, aged 56 years, 5 months, 13 days.

Sarah, wife of John and daughter of Miles Strickland, departed this life March 21, 1845, aged 83 years, 9 months, 19 days.

TODD-CHAPMAN-MERCER BIBLE

This Bible, printed in Oxford, England, in the year 1685, was presented to the Bucks County Historical Society by Miss Marian Lyman. On the front leaf is the inscription "This Bible, so venerated for its antiquity, was bequeathed to me by my maternal grandmother, it having been in the family for several generations. W. M."

TODD—Joseph and Martha, the daughter of Mr. Patrick McEwen, were married the 26th of July, 1757, at Capt. Joseph Inslees by the Rev. Mr. Cambell.

Cortland Tregainy, the son of Joseph and Martha Todd, was born on Saturday, the 11th of November, at four o'clock in the afternoon in the year of our Lord 1758.

Charles Finney, the son of Joseph and Martha Todd, was born Sunday, the 29th of June, at eleven o'clock in the evening in the year of our Lord 1760.

William Rason, the son of Joseph and Martha Todd, was born on Monday, the 6th of September, at three o'clock in the morning in the year of our Lord 1762.

Joseph was married to Elizabeth Finney, daughter of Charles Finney, December 13, 1732.

Joseph was born ye 8th day of April in the year of our Lord 1734, on Monday, 6 o'clock in the morning.

Elizabeth Todd was born ye 5th day of July, 1736, on Monday at 2 o'clock in the morning.

Hannah was born the 8th day of May, 1738, at 4 o'clock in morning.

Rebecca was born the 4th day of June on Wednesday, 1740.

Mary was born ye 15th day of November on Monday at 3 o'clock in the morning, 1742.

Charles was born ye 24th day of July on Tuesday before 3 o'clock in the morning, 1744.

A record of the children and grandchildren of Dr. Meredith: Elizabeth married to Abram Chapman, their issue were Mary, Susanna, Wilhelmina, Ann, Henry, Elizabeth, Isaac, Elizabeth and Samuel. Charles married to Isabelle Dich, of Ireland, their issue Matilda, Courtland, Llewellyn, Ann, Sarah, Henry, Camella, Elwood and Elma Elizabeth.

CHAPMAN—W. and M. Morris married in October, 1829, issue Elizabeth and Morgann.

H. and Rebecca Stewart married in June, 1826; issue: Elizabeth, born March 31st, 1829; Mary Rebecca, born February, 1831; Henry Abraham, born October, 1833, died 1834; Thomas, born on March 27th, 1835.

This Bible has Tobias Leech autograph on the title page.

CHAPMAN—Henry and Nancy F. Shunk married July 8th, 1845. Issue:

Fanny born June 6th, 1846.

Arthur born April 13th, 1848.

MERCER—William Robert, U. S. Navy, to Mary Rebecca Chapman, of Doylestown, Bucks County, Penna., October 11, 1853.

Henry Chapman, son of William R. and Mary R., born June 24th, 1856.

William R., son of William R. and Mary R., born May, 1858.

LAWRENCE—Timothy Bigelow, of Boston, belonging to the American Embassy at London, to Elizabeth, daughter of Henry Chapman and Rebecca, his wife, married October 11, 1853.

T. Bigelow died March, 1865.

MERCER—Lela L., daughter of William R. and Mary R., married July 188— to Hubert Fidler in Boston, Captain in the Austrian Army.

LYMAN—Richard Morris Lyman and Helen Patterson Flint, of Oakland, Cal., were married December 16, 1891.

Richard Morris, Jr., born at Oakland, March 15, 1893.

MEREDITH—Hugh and Mary Todd were married the 14th day of May, A. D. 1772, by the Rev. William Frazer, of Amwell.

Elizabeth Meredith, their daughter, was born 4th day of November, 1773.

Charles, their son, was born the 16th day of October, 1775.

Died, the above Charles Meredith, M. D., July 29, 1831, about 4 o'clock in the afternoon, aged 55 years and about 9½ months.

Thomas Nicholas was born the 29th day of September, 1778; departed this life 1855.

CHAPMAN—Abraham, Esq., and Eliza Meredith were married the 15th day of December, A. D. 1795, by the Rev. Dr. Andrews, of Philadelphia. They had issue: Mary, born March 17, 1797; departed this life August 28th same year.

Susanna, born 11th of November, 1798; died February 5th, 1807.

Wilhelmina and Ann, twin daughters of Abraham and Eliza, were born January the twenty-seventh in the year 1801. Ann departed this life September 5th, 1803.

Henry Chapman, their son, was born February ye 4th, 1804.

Elizabeth, their daughter, born July 28th, 1807, and died August 19th of same year. There were three others who died in infancy.

WEAVER BIBLE

WEAVER—Isaac born September 27, 1819.

Stacy born September, 1846.

Reuben born April 3, 1848.

Hugh born February 17, 1852.

Cypia Ann born May 27th, 1822.

James born April 8th, 1856.

Clarence born 5th day of December, 1890.

Anna Reba born 25th day of September, 1888.

Stacy L. Weaver married 1872.

Isaac died November 28th, 1877, aged 58 years, 2 months, 1 day.

Cypia Ann died August 21, 1910, aged 88 years, 6 months, 17 days.

A Rafting Story of the Delaware River

A series of unsigned articles which appeared in the Walton, N. Y., *Chronicle* from June 21 to October 4, 1883. Since then discovered to have been communicated by Joshua Pine, the third, Walton, New York.¹

INTRODUCTION

IN MY boyhood I lived on the banks of the beautiful Oquago or West Branch of the Delaware River, grew to manhood in its valley, and have spent a life of nearly "three score years and ten" amid its beautiful scenery. I have felled the forest, I have followed the plow, I have engaged in lumbering and rafting; have been down the river, as hand and steersman, until all its scenery, all its places of note, all its natural beauties and adornment by art, are beautifully engraven upon my memory, and if I can but half describe the picture as it now lies before me, from Delhi to Trenton, a distance of two hundred and fifty miles, I shall be content.

BUILDING A RAFT

But first of all let us build a raft. When we have lumber to run in the spring, the grubs will be cut in the fall before snow gets too deep. Saplings of the size to fill a two-inch augur hole are selected, and grubbed out, and cut three to four feet in length, the butt piece, with the root, being the only part taken. When enough have been secured, for our needs, they are taken to shelter, and during the winter prepared for use by shaving so that they can readily be inserted in the holes bored for them, the roots or heads are made so that they fit snug to the under side of the runner, the heads are left larger and dressed to about an inch in thickness, the under surface rounded so as not to catch or hang on dams, stones, etc. The grubs are now ready, the lumber is "stocked" or "bunched" on the bank, where there is an eddy or water suitable for rafting.

¹ The Pine family were pioneer settlers in Walton, having arrived there in 1785. Joshua Pine, the elder, was born in Queens County, Long Island, in 1729, died in 1809; his son, Joshua Pine, Jr., was born on Long Island in 1761 and died 1818. The author of these newspaper articles was Joshua Pine, the third, who was born at Walton, November 5, 1798, and died there April 13, 1888. He was therefore 85 years of age in 1883 when he contributed these articles.

Spring approaches, the river breaks its icy bonds, the hands previously engaged come on, and the work of rafting begins. One or two are selected and set to boring. An incline is selected, or an artificial one made, on this a frame for "crib" building is fastened, three "grub plank," or runners are put on the frame, and the grubs put in, then three crib scantling are put on to the grubs, crosswise of the runners. The crib is then "squared" by two sticks cut the proper length, by putting the one end of each against opposite corner grubs. The other ends are brought together in the middle and pressed down until they lie straight. Test this cornerwise, both ways, and the crib is square. Fill the spaces between each crib scantling "floor" in the last two in each space, put cap scantlings on the grubs lengthways over the runners, and wedge down by the side of each grub, slide into the water, and one crib is made, and a float, of sixteen to eighteen feet in length, and from sixteen to twenty-two feet wide. Build the second in the same way, bring it end to end with the first, and we find the grubs in line on the two sides and in the middle. When they come together the end grubs are but a foot or two apart, and scantling called "lockets" are bored so as to fit these grubs, and are wedged on as before, by the side of the grub. As many of these cribs are put together, in this way, as are desired. If four or five, it is called a "colt"; if from eight to ten, it is called a raft, and when four colts are put together (two end to end), or two long rafts, it is called a double raft or "fleet." If a long raft is built, eight, nine or ten cribs are fastened together, as above, and the work of building up begins. Four courses, of three-inch-thick timber, are put on the cribs, all over the raft, between the grubs, care being taken to "break joints" for every course. End pieces are bored on top of the first course at each end of the raft, and wedged down. After the four courses are on, the "shingle" courses are put on. They are put on so as to break on or cover the first joint from the end, and each course thereafter is shingled on until the desired thickness is attained. From seven to nine courses of lumber, three inches thick, or its equivalent, if the lumber is less in thickness. Then the "head blocks" are bored on at each end, four scantling deep, and wedged. The center end grub left for one oar pin, another hole bored, and another oar pin wedged in, so that each raft has at either end, two oar pins, for emergency or accident. The "binders" reach

across the raft and are bored on to all grubs, and wedged down. The bridle pieces are bored on from each corner of the head blocks, reaching back far enough to be put on four grubs. All loose lumber, like square timber, two-inch plank, boards, and the like, are put on in the middle of the raft, crosswise, and we are ready for a start, all but the "dinner-box" and the oars.

Our stems or tillers are of hemlock, pine, poplar, and basswood, the latter being preferred, and more generally used than any other. The stem should be straight, about forty feet in length, and at least seven inches in diameter where it is bored to hang on the pin. The shank is sawed in five or six feet, the thickness of the blade, the piece bored out and the blade inserted in the cleft, and firmly pined or spiked in. The blade is made of hardwood or hemlock (the former preferred), twelve or thirteen inches wide, fourteen or sixteen feet long, two inches thick at the butt and three-fourths of an inch at the top end, and set in the stem at an angle, that more of the blade may strike the water. The oar-stem having been nicely trimmed and the end made small, to admit of easy handling, it is run onto the head block where it will nicely balance. It is bored and the hole beat out long on top, to prevent binding on the pin. The oar is shipped, and now we are ready for our trip, for in the meantime, the "guid wife" has stored the dinner-box with bread, butter, cheese, eggs, doughnuts, boiled ham, and other eatables. The rope is untied, the hands take their places; the order "pull out, boys," comes from the steersman, we are afloat and have begun our journey.

LUMBERMEN AND FORESTS

In the long ago, the forms and faces of many West Branch lumbermen were familiar to me, who alas, have long since crossed to that "bourne from whence no traveler returns."

I trust I shall be pardoned for recalling the names of those who took a prominent part in lumbering, and if names are missed it will be from lapse of memory. First, and most prominent was Esquire Paine, or "Daddy," (as he was familiarly called by his acquaintances), who drew his lumber (pine) from the Charlotte, at Davenport, and rafted it at Frisbee's, where the Elk Creek comes into the river, about three and one-half miles above Delhi village.

Many obstacles had to be overcome, and much hard work done, before his lumber was on the bank of the river. His pine grew fourteen miles from where it was rafted, and between the two places a mountain which is the divide between the Susquehanna and the Delaware must be crossed, and for two miles there was no road. A good road was soon made through an unbroken forest, which was used many years by the public, called the Paine road, from Briar Street, to the old Catskill turnpike. Year after year, in the winter time, many men and teams were employed in hauling lumber from his mill in Davenport, to the Delaware. In the spring it was rafted and run to Philadelphia, and sold for from nine to fifteen dollars per thousand feet. The Sloats, Fisher, Thompson, H. R. Millard, and Whitlock rafted also at Frisbee's. Colts only were run from that place.

On our way we pass the mouth of Fall Brook, which comes with a rush and roar through a deep glen, bringing the water from many a spring in the town of Meredith.

As we come to Delhi village, we go under the first bridge which crosses rafting water of the Delaware, and as we are passing through the village, at Kingston Street, we go under the second bridge, and now Steele's Brook comes in, placidly. This rises in Meredith from a beautiful little lake, called by the euphonious name of Robinson's pond. Steele's sawmill was on this brook, just outside of the village. It had been built many years, but whether rafting lumber was ever sawed there or not I do not remember. Much of the lumber in which the men of Delhi dealt, was manufactured on Elk Creek, at Hinkley's and McDonald's mills.

Among the raftsmen and lumbermen of Delhi village, were General Putnam Farrington and his brother, who were both steersmen.

When a boy, I remember seeing General Leavenworth and hearing that he had been a Delaware steersman.

There were also, the Goodmans, Edgertons, John Fisher, who was a steersman, J. P. and William Flower, Alexander LaValley, James Elwood, and others whom memory fails to recall.

We pass on and see high hills on our right and on our left, but our course is through a fine wide valley until we go under the third and last river bridge in the town of Delhi, here the

river receives the water of the Little Delaware, which takes its rise in Lake Delaware, in the town (township) of Bovina.

We pass the point of the hill, on our right, as the valley broadens out and a beautiful landscape view is presented to us as we come to Peake's Brook, so named for Oliver Peake, who first settled there, and who with his brother Roswell, became great lumbermen and steersmen. They raised large families, and their male descendants almost all became lumbermen, and many of them steersmen, who have been identified with the growth, development and prosperity of that part of Delhi and Hamden.

We soon come to where Charles Post lived, on what is known as the Hutson farm, who was one of the most extensive lumbermen. His lumber was manufactured on Peake's Brook, and rafted at the eddy. He acquired a competency and returned to a farm up the brook, in the edge of Meredith, and for many years lived to enjoy the fruits of his energetic younger manhood. He was succeeded by the Hutsons, who also engaged in lumbering. "Tom" having had experience enough to give him the skill to steer.

Asa Howland was also a lumberman and a skillful steersman. He was succeeded by the Weismers, who built a mill on Platner brook. The Platners were also engaged in the same business, as well as Mr. Yendes (who was a first settler) and his sons, J. B., of Hamden, and Joseph, of Hancock, who both became excellent steersmen and successful business men, honored and respected by all that knew them.

We have run along a hill on our left, taken the water that Platner brook is pouring in, passed by the Yendes homestead, and see on our right the farms and houses of Judge Bostwick and his son, Marcus, who never engaged much in lumbering, but who have crossed the boundary that separates the living from the dead, and left behind them a record and a name that the living might envy, and have set an example that posterity need not be ashamed to emulate. Just below, we come to the village of Delancy, where a bridge spans the river, and below, Barker creek comes in on the right and Bagley brook on the left.

The names of a host of men are remembered who were engaged in lumbering, but the forms and faces, names and deeds

are all that is left of many of them, for they have long been sleeping "the sleep that knows no waking."

There was Rowland Robinson, father of Frank, the Peakes, John Launt (who lives on Pine's brook, and who was a good steersman), William Babcock, father of George and Samuel, Henry Holmes, Isaac and David Williams, Philip Maxwell, the Barbours, James Stoddard, P. B. Pettice, E. Bagley, H. B. Goodrich, father of Jerome J., of Delhi, the Masons, George and Augustus Chace, father and grandfather of Levi Chace and Mrs. R. Harby, Harry Chace, father of Creen Chace and Mrs. H. Launt.

We pass along, and soon have passed under another bridge, and are at Hamden, where another host of names and memories are thronging through my brain, recalling my boyhood days, and bringing to mind the time when I was a lad engaging in a boy's sports and pastimes with zeal, or sitting on the bank of that river on whose water I have so many times made a journey to the sea, of which I then knew nothing, pensively gazing into the heavens or into the limpid water at my feet, weaving for myself romantic visions of greatness and renown that have never been realized. But I must stop these retrospective fancies, for the task I have set myself will tax all my power, and more; for the subject is worthy the genius of a Headley or any of the most celebrated word painters.

At Hamden, there was Barker, Jerry Launt and sons, John, (mentioned above), Lewis and Phillip, and a Mr. Waring, Peter Launt and sons, Frederic, Jacob, Hermon James and Philip, John and Martin Howard, and Roswell Brant. After the death of White Griswold's father, who was a lumberman, White settled up the estate, succeeded his father in the lumbering business, and locating in Hamden, became the most extensive lumberman on the waters of the West Branch, amassed a fortune, and died a year or two ago, in Walton, at the age of 86.

Austin Bassett bought the sawmill of Mr. Griswold, in Hamden, ran it a few years, and bought the mill in Walton village, now owned by Wood & Gould, where he was killed instantly by a log rolling from a high pile and striking him on the head. Walter Chace, grandfather of Green, was also engaged in lumbering, but at Delancy.

Below Hamden we see Crawford brook, come in on our right,

also pass Betts' brook and the place where many rafted their lumber. There were H. Edwards and his sons, Anson and J. S., John, Daniel and Edward Combs, and also Benaje, H. C. and H. B. Hawley, Jesse Finch, W. H. Knowles, J. A. Holmes, several of whose sons have become great East Branch lumbermen. The Mallorys, Terrys, Keelers, Simpsons, Philip Brisack, and H. L. Benedict, brother of Daniel, at East Walton.

ACCIDENTS AND DROWNINGS

We float down the little river to Shaw's farm, with its wide and fertile flat on our right, under the third and last bridge that crosses the river in Hamden. Just below the rift below this bridge, a tragedy occurred, over fifty years ago, that cast a gloom over the whole community and will be remembered yet by many. Below the rift is deep water, called the "clay hole," and the neighbors were all gathered near there, either to work on the road or for a logging bee, (I am not certain which), and at noon a number went into the "hole" to bathe. Among these was a young man, Alanson Trueby, who was at work for one of the neighbors but without family or relatives in Hamden. Trueby was seized with a cramp, when a man on the bank, watching the bathers, named Newbury, said: "Men, are you going to see that man drown?" and jumped into the water to rescue him, when he was seized by Trueby by his neckerchief, in a death clutch, and drawn under the water and both were drowned. Mr. Newbury was a prominent citizen, father of Loomis Newbury, of Troy, Pa., who married a sister of E. B. Howland.

Above the Mallory bridge where a sawmill once stood, a raft was stuck on the dam and left over night. A rope had been tied from raft to shore. In the morning, several men started from the raft to the shore in a boat. The current carried the boat under the rope, and Charles Eells was knocked out of the boat and drowned. He was a brother of the late Samuel Eells, and of Mrs. T. S. St. John, of Walton. This occurred in the Spring of 1841 or 1842.

Another tragedy occurred at the Flats bridge, not far from the same time. A company of farmers who lived on the Little Delaware had been to Delhi with a neighbor named Robbie

Balantine, with a team and wagon. There was a flood in the river, and Little Delaware and the roads were flooded. Balantine drove into the current, and he and one neighbor, together with the team, were washed off the road, and Balantine and both horses were drowned. The neighbor escaped by seizing a bush that grew on the bank and pulling himself out. Another accident occurred at a crooked place below the Hamden dam, at Fish's bend. William Mason was knocked into the river by an oar, but not drowned, for his neck was broken by the blow from the oar. He was brother of the late Mrs. Peter Launt, and father of the late William Mason, of Walton. At Shaw's flat a Scotchman was drowned. He had been washing sheep, and the sheep got away, and running to head them off he ran into a binnacle hole and was drowned before help could reach him.

Many years ago the bridge at Delancy was built on wooden abutments, filled with stone. During a Summer freshet a colt was coming down the river from Delhi, and many of the school children, as well as a number of men, stood on the bridge watching the raft, when it struck a pier, knocking it out, and letting the bridge fall into the river. The men on the bridge took hold of hands and gathered around the children and hauled them off in safety. But all did not escape. Crane, the owner and steersman, had a leg broken, and William Barlow, uncle of the late Joseph Barlow, had a shoulder broken, and Nathan Terry, an uncle of W. M. and H. Terry, was knocked into the river and would have been drowned had it not been for an old man named Edwards, who jumped in and saved him. Edwards wore an old-fashioned long tow-frock, which Terry seized hold of and was towed ashore. "Uncle" Isaac Goodrich went down with the bridge and floated down on the rubbish a long way, but was finally rescued. He was father of Dr. Goodrich and grandfather of Edward Bagley.

The death of Dr. and Mrs. Maynard, and Mrs. Carrington, by drowning in the river, at Hamden, is of course well remembered. There was a flood in the river, and the water ran over the road between the Hamden bridge and the higher ground on the East side. The unfortunate victims had attended a donation in the village, and returning in the darkness, drove into the water and were swept off and all drowned, the body of Mrs. Maynard not being found until several months afterwards.

After leaving Mallory's bridge, we run along by nice stretches of river bottom, on over mill-dams, for the river, at the time of which I write, was thickly studded with sawmills, and have seen the incoming waters of Loomis Brook on our right, and Mallory's on our left, and received the water of McLean Brook at East Walton, speed on and under Weed's bridge. Still hurrying on, take in the water of Water's Brook, from "Morgan Water Hollow," round Willow Point, pass the mouth of Townsend's, now Marvin's Brook, skirt along the base of Pine Hill, and are at Walton, where East Brook pours its volume, that it has brought from the hills in Franklin and North Hamden.

WALTON, HOME OF CAPTAIN JOSHUA PINE

We have passed by the old lumbering places of the McLeans, Weeds, the Ogdens, Abraham and Judge Isaac, the Marvins, Thomas and Jared, both of whom were noted steersmen, Isaac and William Townsend. On the death of Abraham Ogden, his son, William B., at the age of sixteen years, took up his father's business and began his career as a lumberman, which he followed with energy and success, not only on the Delaware, but after he went to Chicago, in 1835, where he became one of the most noted and enterprising lumbermen of the United States, obtaining his lumber from the vast pineries of Michigan. His mills, built at Peshtigo, were burned, with a vast quantity of lumber. Some of the Walton lumbermen whose names are remembered are Beers and Stockton, Bennett Beardsley, Jetur Gardiner, A. N. Wheeler, Case and Sylvester Brisack, who sold the last of the Townsend pine in the Philadelphia market.

The river above Walton is narrow and crooked, and the lumber that was run from above, was all rafted in colts, but one long raft ever having been run from above Walton, and that a nine tier raft, from Benedict's, at East Walton, by Joseph Combs. But few long rafts have ever been run from Walton. The short turns at Stockton's rock, a little below the village, was the bane of raftsmen.

Walton was once a great rafting point, lumber being drawn from the Ouleout to this river, and rafted here. Lumber was drawn from the Susquehanna, from Otego, Unadilla, and Sidney, to quite an extent.

In the winter of '40 and '41, two West Branch lumbermen bought 100,000 feet of pine boards, and 25,000 feet of cherry, on the Ouleout, near Case Settlement, for which they paid for the pine, \$6 per thousand, paid about \$2 per thousand for hauling to Walton, rafted, and ran it to Philadelphia and sold it for \$10 there.

At Walton, there were a number engaged in lumbering later than those mentioned above, among whom were the sons of Col. Thomas and Jared Marvin, of whom N. C. and George W. became skilled steersmen.

About Walton was once a large quantity of the best pine, but it yielded to the ax and saw of the lumbermen, and the Delaware stands confessed as guilty of contributing her full share in aiding the lumbermen in stripping the country of its lumber. After the pine was gone, the hemlock forests that covered the hillsides in every direction with "living green," were also attacked, until now but a few scattered clumps remain; that must soon go the way the former went, and we must be content to get our supply of lumber elsewhere, as those are now doing above us. Even now more lumber is brought from other places, to Walton, than is manufactured at home.

Leaving Walton, that in early days of rafting was but a small village, but has now grown to be a large one, with a population of about 1,800, we pass under the bridge, and head, soon after, nearly due west, see the water of West and Third Brooks come in, pull up sharp to the point on the left, and hold up hard, and if we miss Stockton's Rock, feel well pleased. Head south, run down to the "Catch-All," turn as square to the right as water can run, pass Island Park on our right, and run along the base of South Mountain on our left, pass by the Pine homestead on our right, by the mill, over the rift, by the mouth of Pine's Brook, and are in Pine's Eddy, and know that, if danger is not passed, we will have more sea room, at least, for the water that pours in at Walton, by the three brooks, makes more of a river.

Pine's Eddy and Pine's Brook were named for the grandfather of Captain Joshua Pine, who was the first settler here; and Bob's Brook and Cove were named for an Englishman, named Bob Simon, that once lived below Pinesville, on the river bank.

Joshua Pine, the first settler, was succeeded by his son,

Joshua, who was a thorough business man, and engaged extensively in lumbering, and transmitted an unsullied name to his posterity, leaving an impress that manifests itself in his descendants.

Capt. Joshua Pine, his son, now in his 85th year, has been a notable steersman.² Frederick Pine, Beers, Nichols, Wakemans, Graham, Cables and Buckbees, were lumbermen in this neighborhood, and some few of the last named are yet in the business.

Hundreds of colts would come in spring time, and land at the village and at Pine's Eddy, and the houses all along would be filled to overflowing with raftsmen, and steersmen would be in great demand. There were many steersmen that lived above Walton, in the long ago, and I can recall the names of but four who are now living that were "thorough" steersmen, viz.: John Launt and Ira Peake, of Walton; Joseph Yendes, of Hancock; and J. B. Yendes, who lives near the homestead up the river, in the town of Delhi. Extra hands were put on the rafts until Hancock was reached, when they were paid, (usually \$3 for the trip, in the early days), and they must tramp back on foot as best they could. Those belonging to Rock Rift, South Walton, Pinesville and Walton, usually came up the Cadosia by a path through the woods, (for there was no road over the summit then, while those that belonged above Walton usually went up to Harvard, on the East Branch, up Baxter Brook, over Bear Spring Mountain, through the Morgan Waters hollow, and thence to their respective homes. Weary, oh, what weary tramps to those tired raftsmen! Many a time all night, through rain or snow, through woods, across creeks, over mountains, through mud and mire, to reach home, but to repeat the same thing again, for perchance, another colt is ready, the water is falling, and no time to rest. Well do they understand that "time and tide wait for no man."

Many a time did Pine's Eddy present a busy scene in the morning, in rafting time. The untying the rafts, pulling out into the current, floating along gently until the rift was neared, the rapid movements of the hands as they braced themselves for the pull and as they neared the islands just below; the change

² Captain Joshua Pine was the author of this paper.

of position of the hands as the order came, "Jersey"³ or "Pennsylvania," all presented a scene of excitement and enthusiasm to which the eddy is now a stranger.

It has been several years since any rafts have been run from or above Pine's Eddy, and probably no more will ever be run. Below Pine's Eddy were several lumbermen—Eli Gould and later, his son, Alfred Gould, Hull Bradley, and afterwards George, his son.

Before the Erie Railroad was built, the home route for through hands, those living at Deposit and below, was from Trenton to New York, thence up the Hudson to Newburg, from there by stage to Cochection, and the rest of the way on foot, or on foot all the way from Newburg. Those that lived above Deposit came up the Hudson to Kingston or Catskill, from there home on foot or by stage, according to each one's fancy or the contents of his purse.

Now, at Pine's Eddy an iron railroad bridge crosses, and a railroad runs to Hancock over the Summit and down through the Cadosia valley, on the same ground that so many weary raftsmen have tramped over, many and many a time. Little did they think that the shriek of the engine would ever be heard in this vast solitude. If a wizard's spell could have been cast over the stretch of forest from Hancock to Rock Rift on over mud and mire, on across the river to Walton, on along the river's winding to Hamden, and still on to Delhi, and had a good conveyance like a railroad train to take them to Walton in an hour, Hamden in an hour and a half, to Delhi in two hours, for sixty cents, eighty-five cents and one dollar and eleven cents respectively, how gladly they would have availed themselves of the chance, and how many nights and days of travel it would have saved the tired, wet, and hungry raftsmen.

Many an amusing incident has transpired here, but I will stop to give only one or two. A number of years ago in spring time many colts had come from up the river and landed in Pine's Eddy, but they were in want of steersmen; so a gentleman, a resident, was prevailed on to steer a colt to Ball's Eddy. He took command, the colt glided slowly out of the eddy, the rift

³ The term "Jersey" is used throughout this paper to indicate the left side of the Delaware river, including that part above Port Jervis, where New York is the boundary or left-hand side as the rafts proceed down stream.

was neared, orders promptly and confidently given, but alas! "a zeal without knowledge," and the raft went firmly onto the first island but a few rods below the eddy. Another, an up river man had in the eddy a raft that had been left there. He came down with a team. The team went right back. The raft was started and went upon the second island a few rods below the first, and the chagrined raftsman had to build a float to go ashore on, and then foot it back home.

The course of the river here is almost due west till it strikes Bank's mountain, and a stranger would be at a loss to know whether the river ran to the right or left, but the abrupt turn to the south along the base of the mountain soon takes us to Gould's turn, where Beers' brook empties into the river. This safely passed by a few strokes to Pennsylvania and then a few to Jersey, we are gliding into Wakeman's pond and on through the "Den," with high and picturesque hills on either hand, clad, in sober hues (for it is yet early spring time), relieved by patches of snow and clumps of evergreens here and there on their rugged sides to their very summits. The Den, in summer, presents a scene of rare loveliness. Beautiful in a state of wild rugged nature, it is still more beautiful as it is adorned by the skill and arts of our present civilization, and fortunate indeed are those whose lot is cast in this little valley embosomed by those majestic hills.

Our raft is still gliding along, now close to the mountain as if trying to find an opening through which to emerge into more open country; and the opportunity is afforded, for as Wakeman brook comes tumbling into the river the valley again broadens and another eddy is soon passed. One of the most shallow places is reached, and to the left Chace's brook is seen leaping through an arched causeway under the railroad that is many feet above the river and still going up until rock cut is reached at the summit. As we go under the bridge that spans the river here that is maintained by two towns (townships), Tompkins on the left, and Walton on the right. The river from Rock Rift is washing the foot of Summit mountain, the valley broadens a little on the right when Fish brook adds its water from between two hills whose bold promontories are golden in the sunshine.

Alverson's turn is passed, and as we head more west Owen's rock comes in sight, which time and frost has loosened from its

bed and sent thundering down the mountain-side into the river that flows along till Carpenter's Eddy is reached. Here again the valley broadens out, and Dryden brook, from away up in the hills that divides Walton and Tompkins, pours its volume of water in to swell the turbid river. This is quite a rafting point, and was one of the first places of settlement. In this neighborhood were many lumbermen, such as the Bennetts, Fraziers, Gregorys, Alversons, Carpenters, Chamberlains, Loves, Sutton, Boyds, Grants, Fuller, and Websters. John Webster was a noted steersmen and salesman down the river, selling large amounts of lumber for other lumbermen. From here nothing of moment occurs, but Park's cove is soon in sight, where the river acts as though it was trying to force its way through the hill, but turns suddenly to the left, and still rolls on. A noticeable adventure terminated at this cove not many years ago. A raft came from up the river one night in early spring time, and the men attempted to land at Pine's Eddy but missed it and were compelled to go on. Another attempt was made to land; two men were put off to take the rope at Wakeman's dam but failed to stop it. On they went, hoping to stop at Rock Rift. Here again two men were put off, and the raft run in end to shore, but yet they were unable to stop. Their force was now reduced to three men and one boy. The river was high, snow and ice to the water's edge, the night growing colder and darker, the rope coated thickly with ice, yet on they must go and on they did go till Little Willow bar was reached at Park's cove, that stopped the raft but on the wrong side of the river. A float was made in the darkness, the angry water was crossed, and tired, hungry, and wet, and one of them hatless, they slowly plodded on to Cannonsville, where they were fed, warmed, and hatted.

Just below Park's Cove, Speedwell Island once occupied a place in the river, but has been entirely washed away. Here we pass the ford, most used of any fording place along the West Branch. We bear away to the left, pass Winter's turn and Love's rock, head Jersey to avoid the bars below, lay up to the right, pass Turnip-patch bend, go to the right of Underwood's Island, and pass the shallowest place in West Branch. More rafts have been stuck at this place than at any other in the upper waters of the Delaware. City Island is soon passed. Rafts can go on either side, and we are at Cannonsville, called at first,

Dickinson City. Here the hills look as though they had been beaten back and cleft in twain to admit the waters of Trout Creek, which add perceptibly to the volume that is bearing us on toward tide.

Among the prominent lumbermen at Cannonsville was: first, Dickinson, the founder, Darius Maples and son, J. Thompson, Smiths, Cannon (after whom the place was re-christened and named), the Owens, Houcks, H. Beagle, Constables, Durfies, Seymours, Miller, Crawfords, Huntington, Hathways, Walley, and many others. We pass under the bridge that spans the river here. Just below Hoag's eddy, we see Johnny Brook come in on the right. Going slow and easily, we come to Casey's. Here the water gathers into a narrow channel, turns suddenly to the left, and hurls itself with such force against the Jersey shore as to force the water up stream and to the left, forming one of the prettiest coves on the river. The channel is narrow and crooked, and the current strong, and on the point below, many a raft has been wrecked.

Craig's Island is passed to the left, and we come to Craig's Bend. Here, too, a stranger would be at sea to know whether the river ran to the right or left, but the water turns toward the left, plunges against the base of a wooded hill, where Thomas' Cove is formed. The passage is soon made between two rocks called The Brothers, Fitch's Island passed, and also the high hills; the valley broadens on either hand, Stiles' Settlement is on the right, Burrows' dam beneath us, and for a little time the place where the celebrated Snyder axes were made is at our left. On our right, the waters of Cold Spring Brook are coming, turn towards the east, and in looking down the river see one of the most charming views of village and farm houses, hill and dale, that can be found—the village is Deposit.

In Deposit and Stiles' Settlement formerly lived several famous lumbermen, among whom were Uriah Gregory, Wheeler, Hadley, Evans, Hulce, Palmer, Burrows Brothers, Briggs, Edick, Pine, Peters, Whittaker, and others whose names memory fails to recall. Evans' dam is passed, and we are under a wooden bridge; going eighty rods farther and we are under a massive iron railroad bridge, that was nearly a year in building, for the Erie Railroad. Oquago Creek is received into the capacious maw of the Delaware. We are still going along through a fine

section of country till Devereaux tannery is reached. We have now passed Pine flat, so named for Judge Pine, its first settler, and since owned and improved by Judge N. K. Wheeler. Here are now the large stock yards, where cattle are taken from the cars, fed and rested. Below here the land is more broken. Hills begin to creep down towards the river. On the Pennsylvania side a giant sycamore appears to view, that looks at first to be three or four, but as we near it, its form changes, and there it stands, a single tree, a giant among its kind, that has been a landmark for a hundred years, and a warning to look out, for in a short time we must pass Cook House Island.

Hale's Eddy is next reached. The eddy is large, and here millions upon millions of feet of lumber have been rafted, that grew in Pennsylvania. The bridge, and the mouth of Shad-pound creek are left behind, and we glide on till Little Periwig is reached. Here, also, is Travis' cove. The fine farm, called the Greenman farm, is passed, as is Grotevant's creek, where the water sets toward Pennsylvania. Monument Island is passed, and the Horse race is run (an artificial channel on the Pennsylvania side).

The country on either side becomes more rugged and rocky. With a sudden pitch toward Jersey, we are carried past the head of an island on our right, and Half-way rock on our left. Now we find a stretch of good water, but presently Balls-eddy Island is in sight. If we intend to land, we go to the right, if not, we go to the left. This is one of the most beautiful land-locked eddies that can be found along the Delaware, large enough to hold hundreds of rafts securely in time of flood.

This is the place where James Van Auken killed a man by the name of Star, about fifty years ago. Here, also, most of the single rafts that come from up the river are put together, and Ball's-Eddy Creek adds its mite to help swell the current.

Pine Island next claims attention, for it has ever been the dread of all raftsmen, because of its treacherous "sucks," and many a raft has come to grief here, and the conceit been taken out of many a steersman. Three bars, a shoal place, crooks and turns, Park Island and Little Falls being passed safely, we reach Little Falls Island, that sends the water swiftly against Oven Rocks. At this point, all the skill of the steersman and the muscle of the men are needed for a few moments, and, in many

cases, they have not been sufficient to keep from being stuck on the island, or stove on the rocks. Oven Rocks are a mass that rise almost sheer from the water, many feet in height, and take their name from holes in them, having resemblance to the inside of an old-fashioned out-door oven.

Soon after, Sand's Creek is seen, hurrying in on our left. A fine view is had here of the railroad bridge that crosses the creek. We also see the oil tank, from which so many gallons of kerosene oil are daily pumped across the East Branch and up the mountain on the East side. This is yet a great rafting point, and many rafts start from here every time there is a freshet in the river.

Crary's tannery and gristmill are located at this place. Here, there is a low place in the hill that yet separates the two rivers, and Hancock village can be plainly seen nestling close along the East Branch. A little below, along the river, is the best tilled farm on either branch, owned by Flavius Smith. If one could own this with the fine buildings, nicely laid-out grounds, and fancy blooded stock, he might be content if farming was to his taste.

A wire suspension bridge soon attracts attention. This is owned by a stock company, and crosses just where the rocks rise abruptly, as though nature had so placed them as to afford room for the road that bends to the left on a good grade to Hancock village, and yet make secure anchorage for the cables that support the bridge.

On the right the hills seem again to recede, and Holmes Creek brings in its tribute. On the left is a high bluff; but beyond you can see that nature has been carving among the hills for ages, for we pass more crags, get a set towards Drake's Rock, then another towards Apron-string Island, then back towards the point, and we are in the water of the main river. Looking back, on the left we see for the first time, the water of the Pepacton or East Branch, come rolling towards us. This is the great rafting center of both branches, and more of the great lumbermen of the Delaware live in Hancock than any other place. We are now forty miles by the river from Walton, and twenty-two by the road over the summit.

Some of the noted lumbermen and steersmen at Hale's Eddy, are the Surrines, James H. Dickinson, F. Travis, F. Greenman,

Abram Lord and son. At Ball's Eddy, Coles, Labars and Mores. At Hancock, L. Seymour, Newtons, Terwilligers, Jones, Randall, Lakin, Griffis, West, Thomas, Joseph Yendes, Philo Beers, D. Leonard, S. Lincoln and two sons, Joseph Darrow, Labars, and others.

The cove Pennsylvania of Apronstring Island, is one of the greatest rafting places on the river. Just below here are some rocks, that have tumbled into the water, and are the guide to the steersmen, for running at Equinunk. If a certain rock is under water we can go "Jersey" off Equinunk Island; but if not we must pass on the Pennsylvania side, and have "a long pull, a strong pull, and a pull all together," to escape contact with the high point of rocks, just below the village. Murray Island, that stands as sentry over the union of the two rivers, gives the current a set towards a wooded hill to the right, with a semi-circular base coming down to the water. Passing Nobody's, we soon are running along side of one of the finest maple sugar orchards that can be found, owned by Prestons, whose residence can be plainly seen from the river, just before we are at Stockport.

There were three Prestons—Paul, Warner, and Samuel—of Quaker parentage, all noted Abolitionists. Each one had his own particular part of the vast business that they carried on, to superintend. Paul engaged in politics as well as law, and became a judge. Warner superintended the lumbering, and Samuel the farm. All three were educated, enterprising men. Warner was a civil engineer. They are all dead, and distant relatives of the deceased succeeded them, and carry on the business.

We have now had the Erie Railroad from Deposit, as a rival to the Delaware River in the carrying trade. There is a station at Stockport, on the New York side, but the main business is done on the Pennsylvania side. A wire-rope ferry is used here extensively, the mail being carried by it to and from the Station to the Postoffice, which is in the village proper, on the west side. A large amount of lumber is rafted here. Preston's mills are located on Stockport Creek, with an inexhaustible supply of water. A mile up the creek a dam is built, so large as to furnish the mills with plenty of water at all times. Toppollock bar, Knight's farm, creek, and mill, Dilling's creek, and mill, and another great rafting place is passed. Toppollock, Jr., is left behind us, and we prepare to go to the right of Equinunk Island,

and land at the village of the same name, where Equinunk Creek has worn or washed out a little niche from the base of the hill in which the village of Equinunk lies hidden, where one who had taken a dislike to the place, declared, "the son did not shine for three months of the year." This, too, is a great place for rafting, and every year scores of rafts start from here. Soon after, Pull-hair-bar is passed. A wire suspension bridge crosses the river at Lordville, a neat little village on our left.

High hills, wild, grand scenery now presents itself to our vision. Lacey's Bend is being left behind, when to the left an opening in the mountain discloses to our view the valley and waters of Onderdonk Creek, and a little village called Boucheux.

By the course of the river we are thirteen miles from Hancock and twenty-three miles from Fish's Eddy, on the East Branch. The distance is only seven miles from the mouth of Onderdonk Creek, across the country, to Fish's Eddy. Truly, here is a water course that is not sparing of distance.

A steep mountain, with ledges of rock and broken stones visible on its steep side, claims attention. The railroad winds around this mountain close to the river, and where its waters sag heavily towards the mountain, a slope wall has been built to prevent the undermining of the railroad. Rattlesnakes find good places here for their winter hiding, from which they emerge in summer. They seem not to understand the signal warning to "Look out for cars when the bell rings," for many are killed on the rails, by passing trains every year. A beautiful little Leaping Brook comes, in a few seconds, from the top of this mountain, and noisily pours its tiny stream through a culvert into the river. In a little time after, we have crossed Jensen's rift, and are in Long Eddy. Here we stop and tie our raft three-fourths of a mile from the village called Douglas. Another valley and a creek named Geer's, a high divide, and another narrow valley and creek called Adams', is to be crossed before we arrive at the hotel.

Geers, Adams, and Coles were first settlers here, and their names are familiar to all raftsmen, as their descendants still live here, many of them are noted steersmen. This is a great lumbering and rafting point, the lumber from a long way back from the river, being accessible through the valleys that center here.

On the north side of the first creek we cross, stands the last house on the Delaware in Delaware County, owned and occupied by a Mr. Geer. The railroad station is called Basket, from Basket Creek, that we reach after passing Crooked Rift, where a two span bridge once crossed, we see the little valley through which comes its limpid water. Basket Bar is crossed, and our channel is on the Jersey side. Kellum's farm is on the other side, where, it is said, Dow Appley once killed seventy old rattlesnakes in one day.

Below here, where Little Equinunk Creek comes in, is another great rafting place, because in this mountainous region, access can hardly be had to the river, except along the creeks, which are its tributaries.

Soon we get a set towards the Pennsylvania shore, and pull from the rocks that rise perpendicular from the water, then drift with the current to Jersey, pass Cooley's rocks, and another rafting place, Brown's, and the place where Brown's rock was blown out, and we are near Hankins, on the Erie.

Just below on the Pennsylvania side is Pine flat proper, and a hard sag to Jersey. On high ground, in plain view, is a large stone mansion, beautifully situated on finely cultivated ground, owned by George Kellum, and forming a striking contrast to the wild, rugged, broken country all about it. George's Rock is to the left, Ross Island passed on the right side, and a creek comes in from the west, at the mouth of which is George Abrams' rafting place. Pull Jersey for Dreamers' Island, and back again from rocks on Jersey. Keep a sharp lookout for the bar, and we are opposite Callicoon. The hills have been flattened down a little. The valley is narrow and deep, its sides quite steep. The village is on a slope. The railroad crosses Callicoon Creek on a high bridge.

Bush's Bar and Eddy are left as we found them, and a wide, nice flat on the Pennsylvania side owned by Judge Tyler. The mountain on the Jersey side is covered by a stunted growth of pine, oak, etc. Bear Island and its mate come next, we go between them, and have a stretch of good water to Taylor's Island and Landing. Bear Island was named from the following circumstance: A man was going down the river with a tame bear, and saw a woman washing clothes on the shore, and said to her many times: "We've got a bear on our raft!" Neglecting

his raft he went on the island, when the woman drawled out: "We've a bear on our island."

Here we get a view of the Ithaca and Newburgh turnpike, as it is, winding in and out among the hills descending towards Cohecton, two miles below us. There is an eddy below the island at Taylor's, and half a mile below, a sag to Pennsylvania. We go under the turnpike bridge of three spans, and see the village of Cohecton on our left, and Damascus on our right, and a small creek that is in a hurry to get to the river.

The scenery for a long distance has been wild—beautifully grand; and in no other way can it be seen to so good advantage as by following the course of the river as it winds and turns around the bases of these "everlasting hills." Skirting the base of a steep mountain, it will turn shortly around its extreme point, the other side will be presented to view, and likely enough present a more wild and rugged aspect still. Hill after hill, and mountain after mountain will appear, as you look back, to be overlapping each other, as though nature had intended to rip rap the Delaware with giant hills. Ah! noble Delaware. The beauties of thy scenery that thou hast been ages in fashioning, hath a charm for me that no words can express, nor no pen depict.

Below Cohecton for a ways, there are hills (some of them wooded, and some of them barren) on one side of the river, and on the other, fine pieces of bottom land, alternating. We see Page's cove on the New York side of a little island, near which is another oil tank, belonging to the Pipe Line Co. Just below, Beaverdam creek comes in from Pennsylvania. Passing along, there are to southward some rocks on the Pennsylvania side that to the uninitiated would seem as though we could not miss them, as we enter Cohecton falls, about one-half mile in length, where the water is rough and going at a rapid rate. We set towards the Jersey side, but we do not pull for another set away from them carries us rapidly on. A little cross-pulling to keep off the rocks on the right, and we are running on a nice stretch of river with low hills on either hand till we pass Jersey of Horse island. At its foot we set towards the rocks on the west shore, and pass Hog Island on that side, make a short turn to Jersey, pass over Prayer Rock Rift, set strong towards a mountain on the right, that is one of the guardians of Big Eddy. On the Jersey side, opposite us, is what is called the "upper eddy." Ice

is seen along the shore. It is no uncommon sight to see the ice piled up on either shore twenty feet high, from Cohecton to Big Eddy, a distance of nine miles. The channel is narrow, the water deep, and carries us rapidly along. We pass under a wooden bridge that stretches here from shore to shore by a single span, resting upon abutments of solid rock, placed there long before the waters of the Delaware had marked its course from the hills of Delaware County to the sea.

Big Eddy is circular in form, and about three miles in circumference, surrounded by gently sloping hills, with a little valley on either side, where two small creeks empty in. Towards the lower end is a small island, and to the left is a village, and a station on the Erie called Narrowsburg. The river is narrow above, and when the ice breaks up it almost always gorges here, and the eddy is so completely land-locked that it is the last place on the river to break its icy bounds. Many a raftsman has waited wearily for days after starting, for the ice to break up.

Many a steersman has been fooled, for as the raft neared the island, and he thought they were going out nicely, a swirl, common and peculiar to this eddy, has caught the raft and carried it back to the starting point, to be repeated time after time, until perchance a rope is thrown to those on the island, and the raft hauled past, and the current carries the raft out of the treacherous water. When the water is high, and the wind blows, it is yet more difficult to leave, and it is said that at one time, so many rafts had stopped there, that a man actually crossed the eddy by walking from raft to raft. In times of flood, rafts are known to have been completely capsized by being caught in those great swirls, and torn to pieces and tossed about as though they had been straws. At some remote period there must have been an abrupt waterfall here that first formed the eddy. Its shape, the great depth of water, and the rock above it through which the river now runs, and through which it has worn its course to its present bed, attests that at some time far back, here was a beautiful waterfall, and if a fairy's wand could have made the water to fly away, a miniature Yosemite would have been disclosed to our wondering vision.

A few years ago, an attempt was made to find petroleum in the vicinity of Big Eddy. A drill was sunk to the depth of six hundred feet on the Pennsylvania side, just below the rocks

close to the water, and some indications of oil were found, but the work was stopped by the finding of a piece of railroad rail far down in the hole, and all efforts to get it out were unavailing. It was thought to have been put there by a dissatisfied workman who had been discharged. We can see below us that the hills are more open, and we pull from the rocks on the right. Quick water soon takes us to Vangelder's Eddy, on our left, and over Little Rocky rift to Smooth rift, and we are at the head of Little Cedar Falls.

The Erie Railway has been, from Deposit, on the New York side, but now it crosses over to Pennsylvania on a three-span bridge, with two piers in the river. Here, above the bridge a point sets out from the right and a heavy sag to Jersey that steersmen try to pull from. If their calculations are not right, a stove-up on the Pennsylvania pier is not uncommon.

Passing this safely, we are over another rift and at Ten-Mile River, that comes in on the Jersey side, and we are in a large, beautiful eddy, one of the most secure places for rafts in time of high water; and yet from this eddy in the flood of October, 1869, many rafts broke from their fastenings and were lost. Among those who lost their lumber are several who live in Walton. This, too, is the home of the Hankins. Richard and William live here, brothers of Superintendent Hankins, of the Ontario & Western railway.

Below the eddy is a point notable for the amount of floodwood that lodges there, and an old man, Cobus Hoffman by name, known as "Floodwood" Hof man, made a living (if nothing more) by gathering the floodwood, making it into rafts, and running it to Philadelphia, cutting into wood and selling it. He would build a shanty on his raft and live in it until his raft was all cut up and sold.

Our next place is Pine Grove station on our right, where we enter Mast Hope Falls. The current sets toward Pennsylvania, and thence to Jersey, and we are soon passing Grassy Swamp creek and rift, and go by some rocks on our left, that are bad to run rafts over. We run between high hills on either hand, through Westcolang falls, and run to Jersey, pass Holbert's bend, hold to Jersey, and are carried swiftly by Narrow falls into Lackawaxen pond, about two miles in length. At Holbert's bend a creek comes in. The Erie railroad crosses the creek, and

over thirty years ago, this bridge broke down while a stock train was crossing. A number of the men employed on the train, and many cattle, were killed.

LACKAWAXEN RIVER AND DAM

Lackawaxen dam was built by the Delaware & Hudson Canal Co., to form a slack water for canal boats to cross, and as a feeder for the canal. Boats were crossed here by means of a rope ferry for a long time while the Erie Railway was being built. The Lackawaxen River comes in about one hundred rods above the dam; it is the largest tributary of the Delaware so far. On the Lackawaxen, a large amount of lumber has been rafted for many years, but the number of rafts grows less each year, and not many years hence, lumbering will be an industry of the past. Even now it is a rare thing to see a colt come down the Lackawaxen. The mouth of the Lackawaxen is wide and deep, and rafts used to be run from thirty miles from the Delaware. This stream drains a large section of country, its main tributary having its rise on the same ridge from whence the Equinunk creek takes its rise, flowing almost in an opposite direction.

It was evident to the canal company that as the Erie Railroad was to cross the canal, it would be to their advantage to compel it to make an over-crossing, so an alteration of the canal was made for a short distance, and an aqueduct built across the river about 300 feet below the dam, made of timbers resting upon four solid pieces of masonry, where it stands as evidence of the progress of engineering skill. Every precaution has been taken by the canal company to prevent loss to raftsmen. Wings extend from the dam up, four or five hundred feet, and near the upper end of the wings a buoy is anchored to guide steersmen in entering the channel, and run safely between the piers on which the aqueduct rests. Chutes are made of timber from the dam to the aqueduct piers. The canal company built a house on the bank twenty-five or thirty rods below the creek, which is occupied by an agent, who asks the name of the owner of every raft that passes, and the name of the steersman, and directs him how and when and where to pull, and how to run. But notwithstanding all these precautions, a raft gets stove against the piers occasionally, when the canal company promptly pays all damages.

Just below the canal is the little village of Lackawaxen, and an Erie station of the same name. We pass on between high hills and rocks, with the canal on our left and the railroad on our right, and we pass Big Rocky Rift. Opposite Big Rocky Rift, a mile below the dam, on the New York side, is where the battle of the Lackawaxen (Minisink) was fought, between the Indians and whites, the former commanded by the famous Mohawk Chief Brandt, and the whites by Colonel Hathorn, July 22, 1779. Forty-four whites were slain. Their bones lay bleaching on the ground until 1820, when they were gathered and buried at Goshen, and a monument erected at that place. Another monument was set up, a few years ago, that can be seen on looking in a northerly direction from a farm house on the New York bank, at Handsome Eddy.

We next pass the mouth of Beaver Brook, coming in on the left, and soon we are in Big Cedar Falls, with a strong set to Jersey. Look out for Owens' eel weir rift, for the channel is narrow, and the water quickly takes us under Barryville bridge, and by the village of the same name in Pennsylvania, and the Halfway brook in New York, once a great lumbering point.

We soon see Shohola rock, and quickly pass Shohola Falls and Shohola Creek. The Shohola Creek has its rise in Pennsylvania, about six miles west of Dingman's eddy, a point thirty-four miles below the mouth of the creek. The course of the creek actually makes its run north not far from the river, and pours its black waters through a deep, dark, rocky gorge into Shohola, or Megic falls.

Just below Shohola, during the War of the Rebellion, a train filled with Confederate soldiers, prisoners, was run into by a coal train, and many men were killed, who were buried here on the railroad land.

Just below the falls on the New York side, is the quarry from whence the famous stone was taken, a year or two ago, for W. H. Vanderbilt, and where a still larger one is being quarried for a millionaire New Yorker.

Below Shohola the country opens on the left, but on the right a ledge of rock comes down to the water, along whose side a track for the railroad has been blasted, seventy feet from the water, and where the engineers were let down in baskets, to mark the course for the workmen.

We are now at Handsome Eddy, a beautiful stretch of water two miles in length, gently washing the shore on our left. We move along slowly and smoothly, and soon see Canope's rock, pass it, on the right, enter Buttermilk Falls.

Canope's Rock, at the head of Buttermilk Falls, was so named from the fact that Canope, an Indian, was shot on this rock, by Tom Quick, the noted Indian killer, after peace had been declared between the Colonies and Great Britain. Canope's companion, Ben Shanks, was shot at by Quick's comrade, but he escaped, fled up the river, and showed himself first to a Mr. Ross, who gave him shelter, and for whom Ross Island was named. Ross was one of the first settlers, and his descendants still live along the Delaware.

There is an almost perpendicular ledge of rock several hundred feet high, extending several miles without a break, except where Carr's rock creek has worn its way through to a level with the river. Here, at its mouth, the Erie crosses it on a high bridge, where, the reader will remember that, a few years ago (1869), happened one of the greatest railroad disasters on record. Some of the ill-fated passengers went into the river, and some into the creek and were drowned, and some were killed outright by the smash; and to add to the horrors, the wreck took fire, and some perished in the flames. Nine lives were lost and many wounded; this holocaust of human beings will make Carr's Rock to be remembered as long as the Erie Railroad is in existence. A few days after, a freight train went off the rocks into the river just below where the first accident happened. The river was strewn for miles with flour, grain, etc., and debris of the wreck.

At Carr's Rock we enter Three Mile rift, reaching to Pond Eddy, with a small village on the New York side. At the lower end of the Eddy is a wire suspension bridge, with one pier in the river, which we pass on the right. A creek from Pennsylvania empties into the Eddy.

Below Pong Eddy is Stair-way rift, where Stair-way brook comes in from Pennsylvania. Here the canal is walled up from the river, on our left. Here, as well as in other places, many a raftsmen has learned that he was no match for the canal hand in epithet or billingsgate. The water is what raftsmen call quick, and it soon takes us in sight of Mongaup Island, (the first one since leaving Big Eddy), which we pass on the left side,

and enter the Mongaup Falls, on the Pennsylvania side, and at the foot receive the water of Mongaup Creek, from New York, the second largest tributary, and know that we are nearing Butler's Falls. Pull up close to the Island to avoid the "Cellar Hole." This is swift water here, and an island or point makes out from the right, and the water sets strong to Jersey. In building the canal that here runs around the base of a mountain, close to the river, a slope wall was built that the water sets strong against, and a little out from the wall, is a large rock over which the water pours swiftly, forming a huge roll below it, and between the rock and the roll is a deep depression in the water called the "Cellar Hole." To avoid this hole and the slope wall of the canal, rafts are pulled as close as possible to the point on the right. Sometimes mistakes are made, and the raft is stuck on the point, or they are a little too far Jersey, and must go through the "Cellar Hole," and have the "binders" torn off along the slope wall. Butler's is a bad place, and exacts tribute annually from the careless or incompetent.

Below, the country is somewhat more open, but one mile farther on, we pass close to Sawmill Rift Island on the right, and to the right of all the piers on which the bridge rests upon which the railroad recrosses the Delaware into New York State. This is a long bridge, crossing both the river and canal. This rift is about a mile in length, with rocks on the west side, rough and ragged, nearly three hundred feet high, and woe to the raft that strikes them, going at such a rate as they go here.

After Sawmill Rift we have a half mile of good water, and then pass Stiley Clip and Jerry Eddy, that is an excellent landing place on the New York side.

A more open country is on our left, and we see a nice large village called Sparrowbush, and a station for the railroad. It was one of the conditions of the charter for the Erie, that a free bridge should be built across the river near Sparrowbush, for the accommodation of the people of Matamoras, on the Pennsylvania side. The bridge blew down in 1870, and a wire suspension bridge was rebuilt at Port Jervis.

The hills now recede both to the right and to the left, the valley of the Minisink opens to our view, the canal turns to the east, leaves the river, and in a little while is lost to view.

Looking up the valley we see low hills, and valleys alternating,

rising higher and higher, until hill and valley become indistinct, and are entirely hidden by the encircling blue on the heights beyond.

We now see the village of Port Jervis, lying peacefully on our left, coming close down to the river, with a piece of tableland for a back ground, rising higher below the village, and terminating in a rocky bluff, forty or fifty feet in height. And here on its summit stands a monument that marks a corner of the States of New York and New Jersey.

Stiley Clip is passed (that is a selving rock that runs clear across the river, causing a large roll like the water flowing over a dam).

Between the Clip and the Point we have a heavy sag to Jersey, and a little farther on, the water of the Neversink River that has been brought partly from the hills of Ulster County, is aiding in hurrying us towards Delaware Bay.

On our left we can now see a spur of the Shawangunk Mountain, a goodly share of it almost bare, perpendicular rock, glinting in the sunshine.

We have passed by several places of historic interest, that I will stop briefly to enumerate.

Deposit, on the West Branch, was once a stopping place and rendezvous of Indians and pioneers called for long years, Cook House. Here, the Indians under Brandt, when Colonel Harper and others were prisoners, on their way to Niagara, made a halt.

In the rocks spoken of, at Equinunk, there is said to be a cave in which a family of pioneer settlers took refuge, when pursued by Indians, and eluded their wily enemies. And it is said, a child was born while the family occupied this cave. They remained in it several days, and were rescued by a pioneer ranger, named Bosen, and taken to a place of safety.

Where the little village of Damascus now stands, a fort once stood, for the protection of the scattered settlers. It was once attacked by Indians, but they were driven off without loss to its defenders.

We receive the water of the Neversink, a larger stream than the Mongaup, and next to the Lackawaxen in size, and soon see on our left that we are passing a group of islands, extending some two miles. They are called Neversink Islands. The river is wide, and we run across it and take our course along the

Pennsylvania shore. When the wind blows, it is a bad place for rafts, and many an one has been stuck on some one of the islands. When the water is high and the wind blowing hard, rafts have been run Jersey of the islands; but the channel is narrow and crooked, and steersmen never go there unless compelled to.

Sheep-pasture Rift and Eddy are next passed, and a wide stretch of river with a group of islands, of which we now go Pennsylvania, and we are at Punkies, a place dreaded by raftsmen, because of shoal water and liability to encounter strong wind.

There is a nice wide flat on the Pennsylvania side, for four miles from Port Jervis. We keep the Pennsylvania shore to Old Orchard Eddy. Here a bluff or point sets out. Pull up close to the point and land in the eddy below, which is caused by the point. On the bluff stands a house where hundreds of raftsmen have found shelter for the night.

Leaving this eddy we pass Pennsylvania of May's Bar, and one of the largest villages of the Delaware is in sight. Milford is its name, the county seat of Pike County, Penna. This is a favorite landing place. There is quite a breadth of low land, and a busy, bustling town. The landing place, years ago, was called Cave Bank, from the nature of the soil. The bluff is from fifty to one hundred feet high, with sub-soil of gravel, and at times when the water is high, the gravel washes out, and the surface caves or falls into the river. Van Etten keeps a hotel that is built on this bluff. At one time the bank caved off to such an extent that the hotel was abandoned for a while. Milford, too, is famous for being the home of Tom Quick, before mentioned. Here he lived. Here, too, the tragedy was enacted, by the killing of his father and his family, before his very face, that turned all the kindness of his generous heart for the redskins, to undying hatred of the race.

Just below Milford, the Sawkill comes in and a boat comes out, with Pennsylvania apple-jack, of which the hands partake, which they must soon pay for by a sharp pull. Set to Jersey, and a half mile below pass under a wire suspension bridge, with one pier in the river, sag to Jersey, pull back to run Pennsylvania of a group of islands called Minisink Islands. Along this group of islands is Brink's Rift. On the Pennsylvania shore is a beauti-

ful flat, and a large fine barn, which has for a vane, the image of a negro, holding in one hand a bunch of cigars. This is good wheat and corn land. Below the rift a rope ferry is used to cross from the main land to the islands. The islands extend along on the Jersey side for about three miles.

The mountain now comes to the river on the Pennsylvania side, and the rocks rise to a height of three hundred or four hundred feet above Death Eddy, that takes its name from the tradition that a party of Whites were driven by Indians to these rocks, and what were not killed by their pursuers went over the rocks and were killed by the fall, or drowned in the eddy.

Just below is Death Eddy Island. Some men were once seen planting corn on the island and covering it with their bare feet, the soil being so loose and sandy as to admit of that mode of planting. Just below the eddy was an ancient landing place, but now abandoned.

The country is more open again, and a smooth, nice stretch of water for two and a half miles takes us to Dingman's, a long, nice eddy on the Pennsylvania side. More rafts land here than at any other place on the river, above Upper Black's Eddy. This is of late years quite a summer resort for city people. A small steamer is used here in the eddy, which is two miles in length, and good hotel accommodations can be had. The grand, beautiful scenery, pure mountain air and water, make it attractive to many.

Here a few years ago, I was shown by Westbrook Dingman, an old stone chimney, where his father was shot by the Indians during the Revolutionary War, the family having escaped by taking refuge in a block house near by.

During the war a squadron of cavalry, commanded by Count Pulaski, had to be sent to this region for the protection of the settlers, but his command was soon sent south to reinforce General Gates, where the patriotic Polander gave his life to the then uncertain cause of American liberty. After his withdrawal the Indians kept the settlers in a state of constant fear, and many barbarities and cruelties were perpetrated by them, the death of Bingman, as recorded above, being one of them.

Across from here in the Shawangunk Mountains, can be seen where the Walkill River rises, that runs into the Hudson.

Below, a bridge once crossed the Delaware, which was blown

down a few years ago, and has not yet been rebuilt. A great number of railroad ties, ship-knees, and hoop poles, are shipped from here on rafts to Philadelphia.

Below, we pass a rift, and have two miles of nice, quick water, and a stretch of fine farming land on either side, when we make to Jersey, and enter Safe and Easy Landing Place Eddy, and pass Jersey off Bacon Egg Island, keep Jersey to pass Schapenac Bar below, run to Pennsylvania of Rock Bar, pass VanAuker's cove nearly two miles in length, go Jersey of Buck's Bar, pull to Pennsylvania to Fiddler's Elbow to avoid the sag and a shelving rock that runs out into the water on the opposite side.

Below the point of rock is an eddy called lower VanAuker's.

Below this on the Jersey side, is a steep gravel bluff, from which, a few years ago, several acres slid into the river, but the current soon washed it away. Just below, the water sets to Pennsylvania, and we pull along to Mullner's cove, a favorite landing place. Pass by and we are in sight of Wallpack Bend, and make over to Jersey Point. At the bend the Bushkill comes in from the Pennsylvania side.

This was formerly quite a rafting stream for oak joice. The joice were rafted in small floats, set edgewise, with a spindle run through a hole in each end. The oars were so small that a man could carry one on his shoulder, and were taken back and used on other floats.

The mouth of the Bushkill is a favorite resort of sportsmen. They are often seen here fishing for bass and other fish.

Passing the Bushkill, we pull Jersey to avoid the heavy sag which sets strong to Pennsylvania.

A little below here is a rock that looks like a huge volume of books piled upon each other; one a little shelving rock called Bible Rock, has separated from the ledge and slid down into the river. Below Bible Rock is Wallpack Ferry, and an eddy on the Pennsylvania side. We run about half a mile, and Flat Brook, a large stream, comes in on the Jersey side. About half a mile up this stream is the neat little village of Flat Brook.

Leaving the village of Flat Brook we hold strong to Pennsylvania, and see a rocky bluff on our left. Quick water takes us past Sambo and Mary rift, so named from the fact that a colored man and his wife were drowned here by their boat being upset. We have passed the lower town of Wallpack. The current now

sets toward Pennsylvania, and we run along the side of a bare rocky hill, for about a mile, and come to VanCamp's Island. Opposite the Island, on the Pennsylvania shore, is VanCamp's Nose, a spur of the main rock that guards the shore here. While this spur may be like the nose for which it is named, in shape, color, etc., it is unlike it in hardness, or long since it would have been gone from the many smittings it has received from rafts, etc. We are now in sight of Mine House Island, and pass it on the Pennsylvania side, and run along by Loving Shore. Above the island we have passed Pahaquarry village and creek, on the Jersey side. At the foot of the island the current sets to Jersey, and we run through Shoemaker's Falls, and land in Shoemaker's Eddy, on Jersey side. The eddy is two or three miles long, and a great landing place. The flats are of fair width on the Pennsylvania side. It is two miles from here to the top of the Shawangunk mountain.

Below Shoemaker's, we pass Jersey of Tock's and two other islands, and pass Labar's Eddy, go Pennsylvania of Muskrat Island, and pass Shawnee village and creek from Pennsylvania, just below Muskrat Island. Pull to the left and go Jersey of Depew Island.

There are fine farms on some of these islands, one of them containing six hundred acres. William Dyer, so long a resident of Walton, lived in this section, and has worked on these islands many a day.

We run forty feet from a point of rocks, and Jersey of all the piers of a new bridge, built last year by the New York, Susquehanna and Western Railway.

We follow along the Jersey shore to Smithfield Rift, having gone by the village of Tutsburg, Pa. The Broadhead Creek comes in from Pennsylvania, near the head of the rift. Look out for Little Smithfield Island, turn to the left, and follow down the Jersey shore, as the river heads south, and we see the Delaware & Lackawanna railroad on our right, and the N. Y., S. & W. on our left. They show very excellent engineering skill along the rocky base of the Shawangunk.

We are at the Water Gap, and can see that the Delaware once met an obstruction, that here dared to cross its path and a foe to its farther progress, that was not to be despised—one that could not be frightened by any exhibition of its anger. Only

by slow, steady, persistent effort could progress be made. The Shawangunk, towering 1,600 feet heavenward, on a granite base, was planted square across the track of the river, and bid her defiance. But the grand old Delaware was equal to the occasion. There was no chance for a flank movement, no sapping and mining, no underground passage, but a bold attack in front. If she couldn't go round, she would go over. So, day by day, week by week, year by year, century after century, rising higher and higher, until the summit was reached and an advance guard sent over—a tiny stream, growing larger day by day, as the passage was deepened in the crest of her formidable adversary, until, after many ages of ceaseless, unrelenting washing, the giant Shawangunk was cleft from summit to base, and long years the water has flown peacefully along on its way to the ocean, without "let or hindrance" from this once rocky barrier.

DELAWARE WATER GAP

From here we can see, far up on the mountain side, in Pennsylvania, the two hotels of the Brodheads, that are the resort in summer of thousands from the cities.⁴ One of the Brodheads once kept a hotel below the creek last mentioned, in a little village called Tutsburg, where one day two men came along and claimed his hospitality for a little while. After they had gone, the landlord discovered that his drawer had been robbed, and followed the thieves to his brother's, on the hillside. Finding they were to be caught, one of them drew a pistol and shot their pursuer dead, and wounded his brother, and fled. They were finally apprehended, tried, and sentenced to be hung; but before the day set for their execution, they escaped from jail. One was recaptured and hung, but the other made good his escape.

On the Jersey side the rocks are almost perpendicular, and inaccessible to man; but it is said that honey bees have taken possession of the crevices in countless swarms.

From top to top of the mountains, above the river, the dis-

⁴ These two popular summer resorts were completely destroyed by fire. The Water Gap House, 300 feet above the river on Sunset Hill, opened June 20, 1872, was burnt to the ground November 12, 1915. The Kittatinny, begun by Anthony Dutot in 1829, purchased by Samuel Snyder in 1832, and by him sold to William A. Brodhead in 1851, was completely destroyed by fire October 29, 1931.

tance cannot be more than half a mile, and from the river to the top 1,600 feet.

The layers, crevices and seams show indisputably that this was once one ledge of rock, and that the water has certainly worn a passage through it. The water here is deep, and current sluggish, and a steamer plies here for two miles, capable of carrying from fifty to one hundred passengers.

The top of the Shawangunk can easily be reached by following the course of a small stream that comes into the river on the Jersey side. It was my good fortune to once stand upon the summit of this lofty mountain, and oh, could I but describe the beauties of the scenery that was unfolded to my enraptured vision! To the north and west, hill and mountain, valley and plans, ever presented a new and changing beauty as my eyes wandered over the landscape. Looking to the east and south such a grand panorama of the beauty of nature and of art presented itself so quickly to my vision that I stood entranced by the sight and drank in the beauty of the scene before me to my heart's content. Looking to the right, sixteen hundred feet below me, rolled the Delaware, and on the left the Pawlinskill, and from where I stood a pebble could be thrown into either one. Far below, to the south, the river could be traced to Easton, looking like a silver thread winding along, sometimes close to the base of some hill that is a spur of the mountain, on the Pennsylvania side, and anon leaving the hills and marking its course through the low ground. I saw its tributaries, as they too glistened in the sun; saw field and forest, farmhouse and hamlet, village and town; saw away, far away, till earth and sky meet in one circling of blue. The cars of the D. L. & W. and the N. Y., S. & W. pass swiftly along, far below, with a deafening roar, for the voices of gentlemen and ladies can be plainly heard from the river. It is not uncommon when rafts are going to Trenton, in May, June or July, to see parties of ladies and gentlemen on the top of the mountain, and to hear them in conversation. The changes that have been wrought here by engineering are almost as marvelous as those that have been made by nature. The D. L. & W. railroad has been built on the Pennsylvania side, and shows good skill in the building; but the task was light compared with the effort to build a roadway for the N. Y., S. & W. on the Jersey side of this rocky cleft. At the place where we

emerge from the "gap," on the Jersey side, is a perpendicular point of rock rising sheer from the water, called the Indian Ladder, so named from the fact that the Indians in passing through the gap, on the Jersey side, going up and down the river, would place crotched sticks on either side of this point of rocks, and were thus enabled to pass this perpendicular barrier that they could not scale. Here the rocks have been blasted, and a road-bed formed for the railroad.

As we pass through the causeway and look back, it shows the Gap yet more clearly defined, and for miles its proportions are clearly defined against the northern sky. Just below the point of rocks is an eddy, where rafts were formerly loaded with roofing slate, the only way to get it to market before the Delaware and Lackawanna railroad was built.

Soon after we leave the Gap, Gap Island takes our attention, for the wind sometimes blows hard here, and rafts not unfrequently get stuck on the island. We go Jersey of the island. We can now see a village of houses on the Jersey side, built expressly for the workmen in Howell's quarry, where roofing slate alone is quarried. Howell paid for this quarry \$100,000, about twelve years ago. A half mile below is Decker's wire rope ferry.

As we have passed several of these ferries, it may be of interest to the reader to describe them. A post, tower or tree is located on either bank, and a wire rope hauled taut, from eight to twenty feet above the water. Pulleys are then attached with bow and stern ropes attached from the pulleys to the boat. The boat is provided with planks at each end, on hinges, that fold onto the boat while crossing. When the boat lands they are turned over onto the shore, forming a bridge. The boat is now ready and the stern pulley rope is let out and the stern of the boat drops down, lying at an angle with the rope, and the current carries the boat across. To recross, reverse the pulley ropes, and the bow of the boat becomes the stern. Some of these ferries are valuable, being counted by the owners worth as much as a good farm.

We soon pass by a smart Pennsylvania village, called Slateford, where slate of all kinds are quarried and sent to all cities and villages within reach. Limestone ledges are seen, and in several places have been cut through by the river, but always giving

evidence of gradually running out, as they are seen on the Jersey side. The limestone also shows that the character of the soil has changed since leaving the Gap. Along this section the inhabitants rely very much upon cistern water, the subsoil being of impenetrable flint limestone rock.

Not far below Slateford we enter Dilsey's Rift, at the foot of which a railroad bridge was built last year. This bridge is one hundred rods above the toll bridge which connects the little village of Columbia, in New Jersey, with the larger Pennsylvania village of Portland.

As we come in sight of the upper bridge, the piers of each are seen, and appear to block our way; but if the piers of the first are safely passed, we have no trouble with the second.

The principal industry of Portland is the manufacture of school slates, which makes it the great market for the cherry that raftsmen run down the river and is made into slate frames, which so many of the young readers of the *Chronicle* use daily in the schools. Portland is also a good market for logs.

Leaving Portland we soon pass the mouth of Pawlinskill Creek, and enter Bowman's Rift, after which we have a mile of still water, and go under a four-span bridge, on which the D. L. & W. railroad crosses the river. This bridge is called by raftsmen Sliding Rift bridge. Sliding Rift is about one mile long with a strong set of the current to Pennsylvania. Leaving the rift we soon come to Anter's Eddy, which is about two miles long. It is a great landing place on the Pennsylvania side. Here also are two wire-rope ferries. At the foot of the eddy we come to a group of islands, and pass Jersey of two of them, and Pennsylvania of Mack's and Buttermilk island. There is a large and well-cultivated farm, with good buildings on Mack's Island, and a wire ferry from the Pennsylvania shore to it.

Opposite Mack's Island the D. L. & W. Railway forms a junction with the Trenton & Belvidere Railroad.⁵ Here it plunges into a tunnel, and we see it no more.

The current sets strong to Pennsylvania all the way round Butternut Island. Soon we pass Hartsell's Creek and mill, and enter Big Indian Rift. We set again to the right and pass

⁵ The Belvidere & Trenton Railroad mentioned in this paper refers to the Belvidere Delaware Railroad running from Trenton to Manunka Chunk, later a branch of the Pennsylvania Railroad.

McIlhane's Eddy, above Belvidere bridge, under which we pass, one pier from Pennsylvania, and have reached Belvidere, eleven miles below the Delaware Water Gap.

Belvidere is the county seat of Warren County, N. J., and where the Pequest, another large tributary, comes in. It is also a good market for logs.

We can see that the features of the country have changed. On the right it is rough and broken, as spurs of the Blue Mountains set toward the east.

SHOOTING FOUL RIFT

Soon after leaving Belvidere, pick up all loose stuff, and make things snug and safe, and prepare for Little Foul Rift. Enter the rift two-thirds to Pennsylvania, and passing this a stretch of slack water brings us to the right of Foul Rift Island. Enter Big Foul Rift about forty feet from the Pennsylvania shore, and run down close to finger rocks, on Pennsylvania. Guard against set of water to Jersey, look out for reef of rocks on Jersey shore, and in a few minutes, if nothing happens, we have passed Foul Rift, the place most dreaded on the Delaware. In going through, rafts sometimes dive and strike sunken rocks, over which the water is going at race-horse speed. The raft that strikes is badly shattered and great loss is sustained.

About twelve years ago a raft dove, and struck a rock. One of the logs broke loose, ended over and fell on one of the fore hands, and hurt him so badly that he died in a few hours.

The rift is caused by the course of the river running through a ledge of limestone rock, that is rough and ragged, and from one to two hundred feet high on the Pennsylvania shore. Little Foul Rift and Foul Rift proper, including the slack water between, are three miles in length, and the time consumed in running is about fifteen minutes. The fore-hands stand to their oars and look to the steersman to receive any orders he may give, for a raft will sometimes take a sheer, and a clip or two is necessary, and the order must be given by signs, for no human voice can be heard in this mad rush of waters. Just below the rift is an eddy, and a boat comes out with whisky for sale, and the temperance principles of many a man has been put to a severe strain here. A man must be well grounded in his faith or he will imbibe after

the intense excitement and tense strain of the nerves through which he has just passed.

Years ago, before canal or railroads were built, boats called Durham boats, plied the river, and all the traffic of the river was carried on in boats and canoes. Durham boats have ascended the river as far as Walton, propelled by setting poles and oars. To ascend Foul Rift, rings were fastened by staples to the rocks, and ropes were used to haul the boats up through the rift.

Soon after leaving the eddy we pass Big Capush, by running between two islands, and find quick water to Jones' Eddy.

Here on the Jersey shore is Hutchinsons, a little hamlet and station on Belvidere & Trenton Railroad. It is a good landing place, and many a raft damaged in Foul Rift has been repaired there. Here also, Buckhorn Creek empties into the eddy, on which are two sawmills, where up-river logs are sawed into lumber. On leaving the eddy, we see a limestone rock on the Jersey side, and see on the same side the Trenton & Belvidere Railroad. We pass to the left of Smalley's Island, find quick water for a mile, then slow to Martin's Creek, on the Pennsylvania side. Here is a wire-rope ferry crossing the river from Martin's Creek to the railroad station on the Jersey shore.

On Martin's Creek, in Pennsylvania, are a flouring mill, a sawmill, a cotton factory, and tannery. The distillery once on this creek was burned several years ago. (Later two plants of the Alpha Portland Cement Company were located here. The village on the New Jersey side is called Brainards.)

Leaving Martin's Creek, we enter Hog Rift, so called from the many hogs which had died from eating distillery slops and been thrown into the river, and lodged along the shore, tainting the air with their putrid carcasses. The rift is about half a mile long, after which we find slack water about one mile and a half, and we are in Sandt's Eddy. Leaving Sandt's, we have still water till we enter Little Indian Rift, about half a mile long, where there is shoal water, and many rafts stick. We soon approach Warricott Falls. Just below the falls, on the Pennsylvania shore, we see Shannertown, a smart little Dutch village. Here we see a ledge of rock that crosses the path of the river, and through which a channel has been cut by the action of the water, and here at the lower end of the ledge a spur of the rock

stands out prominently, and far up from the water it bears a resemblance to a human face, and is called Anthony's Nose. On the Pennsylvania side, above the ledge, we pass Durham Boat Rock, looking like a Durham boat bottom-side up. Below the falls, pass Pennsylvania of a rocky point, and are in the great upper eddy, at Easton.

EASTON AND PHILLIPSBURG

At the foot of the eddy is Getter's Island. Easton is beautifully located, bounded on the east by the Delaware, north and west by high ground, and on the south by the Lehigh River. The Delaware is spanned by three bridges, two of which are railroad bridges. The upper one is a public bridge. Just below this the Lehigh River comes in from Pennsylvania and makes a dangerous current which makes it difficult to pass the piers of the two railroad bridges. It was here several years ago that a raft struck one of the piers, and Andrew Morley, at the time living in the town of Walton, was thrown into the water and drowned. His body was found some eight miles below, several days afterward. These railroad bridges (between Easton and Phillipsburg) are the greatest obstruction to rafts found on the river, and cause more loss than any other.

Opposite Easton, on the Jersey side, is Phillipsburg, a large and growing village.

Three railroads, viz.: The Morris & Essex, Lehigh Valley, and New Jersey Central, center here. The Morris Canal terminates here, and forms a junction with the Lehigh Canal. Boats from that canal lock into the river, and cross the river in slack water, formed by a dam built for the purpose, and enter the canal by an incline plane on the other side.

The three railroads cross on two iron bridges, one bridge having two tracks, one above the other. The piers of both bridges are exactly in line, and about twelve feet apart.

Easton is a city, and nicely laid out, the streets running east and west, and north and south, with an active, energetic population of 12,000. It is a large manufacturing city, many mills being used for manufacturing lumber, and consequently the great log market, where more logs are bought than at any other point on the Delaware. Opposite is the island spoken of

above, that takes its name from the fact that a man by the name of Getter was hung on it a long time ago. The island is treeless and rocky, about fifty rods long, and fifteen or twenty wide. The execution was public, and many hundreds of people witnessed it.⁶

Along by this island, on March 6, 1860, a catastrophe occurred, that will be remembered for many years to come. A little steamboat had been built, in Easton, to ply in the waters of the Delaware. For its trial trip the builder of the boat volunteered to act as engineer, assisted by his son. The boat was let into the river through a lock in the Lehigh Canal, and steamed proudly by the city, gaily decked with flags and streamers, and filled with many prominent citizens, while hundreds on the shore and on the island witnessed the first trial of the little stern-wheel steamer. The water is deep close along the island, but the current is strong, and as they neared the island, setting poles were used to help the little steamer stem this swift water. When alongside the island, a dull heavy report was heard. The boiler of the boat had exploded, and what was a scene of mirth and joy but a moment before, was changed to one of woe and wailing. The deck and smokestack were blown clear on to the island, and the hull floated down and lodged against a pier of the railroad bridge. Judge Sharp and the builder (the volunteer engineer), and his son, together with a number of the prominent persons of the vicinity, both ladies and gentlemen, perished with the ill-fated steamboat. We were going down the river at the time, in company with A. J. Andrews, of Walton, and Jonathan Dicks, now of Unadilla. We were near enough to hear and see the explosion. Seeing the dead, as they were carried on shore, and hearing the cries of the wounded, and the wail of friends that had so suddenly been bereft, made an impression upon our mind that will never be forgotten. Our raft passed down through the floating debris, and several articles were hauled upon it.

We now turn to a more pleasant object; for high up above, to the west, with stone steps leading thereto, stands Lafayette College (founded in 1832).

⁶ Charles Getter was publicly executed on this island October 4, 1833, for the murder of his wife, and the island has ever since been known as Getter's Island.

The Lehigh Canal also comes to the river, and here turns to the right and follows the river to Bristol, where boats lock into the river and are towed to Philadelphia. Ten miles above Bristol, at Bordentown, boats are also locked into the river, and many go from there to New Brunswick by the Raritan ship canal.

In the olden time, Governor George Wolfe owned a fine farm, just above Easton, and twenty cradlers were once seen cutting wheat, followed by twenty women binding the grain into bundles. A famous steersman, a long time ago, was compelled to stay a number of days in Easton, when its population was considerably less than now, and he related to me that the simplicity of the manners of the people charmed him, as well as the costumes of the ladies, who were very fond of promenading on fine afternoons, clad invariably in lace cap, petticoat and short gown.

The piers of the old public bridge are forty feet thick, and the arches twenty-five feet from the river, yet in the January flood of 1845 (1841?) a log was driven by the water through the bridge above the arch over the Pennsylvania span. At Easton, more rafts are stove on the piers of the lower, or railroad bridges, than at any other bridge on the Delaware. The current here is very strong and changeable, because of the waters of the Lehigh. Sometimes the freshet in the river will be moderate, and "big water" in the Lehigh, when that river will make a perceptible current clear across the Delaware. Then again the Delaware will be high and the Lehigh low, and again, both will be high or both moderate, changing in either case, the set of the water to or from the piers, and the most careful and experienced steersman is at fault at times in his calculations, and a stove-up is the result.

After leaving the lower bridge, at Easton, the current sets to Pennsylvania against the canal wall, for two miles; and to the left, on the Jersey side, are extensive iron smelting works (the Andover Iron Company's plant, consisting of three blast furnaces). A creek (the Lopatcong) comes in from Jersey, at Bridleman's Bend, and yet the water sags to Jersey against a high limestone ledge, and opposite, on our right, is Whipplewill Island. Here the roadbed for the Trenton & Belvidere Railroad (Belvidere-Delaware) is walled up from the water, and at the

foot of the island is a landing place. Below the ledge, great kilns for burning lime are seen, where a great amount of lime is burned, and sold to the farmers in that region, who raise large quantities of wheat and corn.

A mile below, we come to and go Jersey of Cross Water Island, and at the foot of it there are strong swirls that sometimes catch the forward oars and makes an experienced fore-hand careful, for once in a while a man gets knocked into the river by his oar.

We next come to Old Sow Island, go Pennsylvania of it, and the current sets to the wall of the Delaware Division Canal, lay up to Pennsylvania by Uhlerville, to pass to the right of Ground Hog Island. On the Jersey side we see Carpenterville, where the Pohatcong Creek comes in. The main part of the river goes Jersey of the Island, but sags heavy and is filled with sunken rocks. At the foot of the island is a curious swirling, where it is said is greater depth of water than any place along the river. Here the water runs through another of those granite ledges of South Mountain and forms what is called Haycocks (Rocky Falls) by raftsmen. The current sets first to Pennsylvania, and here we run close to a sunken rock, called "entering rock," to avoid as much as possible the heavy sag. We pull up sharp to Jersey, to miss two submerged rocks. The current now sags to Jersey, with a narrow, crooked channel, and sunken rocks on both sides, which require care and skill to pass in safety. Soon we come in sight of Musconetcong village in Jersey (name changed in 1876 to Riegelsville, N. J.), and the bridge (an old-fashioned lattice bridge), and Riegelsville, on the Pennsylvania side. Here the Musconetcong empties into the Delaware. We go between the piers and have slack water for a mile or more to Durham Rift. At Quinn's Falls, below Riegelsville, N. J., the great mills are supplied with motive power by water being diverted by a wing-wall dam from the rift to a huge "undershot" wheel that turns the machinery. On the Pennsylvania side, about one mile below Riegelsville, where the Durham Creek empties into the Delaware, are located the Durham Iron Works and a village, also the Durham cave, quite a large cavern in a limestone hill. The river then sags to Pennsylvania, and we look out for Old Fry rock. Here at Monroe another Pennsylvania creek (Rogers Run) comes in. About one and a half

miles below Old Fry rock we come to Lynn's Island and falls, which we pass eight rods from the Jersey shore, and at the foot get a sag to Pennsylvania, and have a stretch of nice water for about two miles. On our right, a ledge of red sandstone, known as the narrows or palisades of Nockamixon, rises high and sheer from the ground, with just room between the river and the ledge for the public road and the canal. Here, where a part of this perpendicular ledge rises to a height of three hundred feet, tradition says that a tragedy was enacted that illustrates the favorite maxim of the great Napoleon, that "human nature is the same under the same circumstances," and that the dusky denizen of the forest acted at times just like his pale-faced brother. An Indian of the tribe inhabiting this region, had a beautiful squaw, of whom he had become intensely jealous, and he determined upon her destruction. One day he lured his unsuspecting victim to the highest point of the ledge, and with loving, lying words upon his tongue, deceiving his beautiful dusky mate. Awaiting the right moment, with a smile upon his lips, but murder in his heart, and the glitter of the "green-eyed monster" flashing fury from his eye, he hurled her from the ledge to the broken rocks below, a distance of three hundred feet, where her lifeless body was afterward found.

On the Jersey side the country is fine. The river bears away to the west and we find a smart rift called Nockamixon and see the bluff half a mile below, and can see Upper Black's Eddy. Here the Nockamixon Creek comes in. Up this creek is a great section for raising watermelons. Once upon a time, just at night, a raft was passing the mouth of the creek, when a boat manned by two or three boys came out loaded with watermelons. They were accused of stealing the melons, which the boys denied, but on being told that if they would give the raftsmen some of the fruit no information would be given to the authorities, nor to any one, and though they still denied the charge they put on the raft a half dozen of the finest luscious melons that ever regaled the palate. Shortly the raft (which was a single one) was lashed to another one that had ladies for passengers, and a house for their accommodation, in which the melons were kept, and on which all feasted to the end of their trip. If any of the ladies should read this sketch they will remember the incident.

After we leave Nockamixon Rift we round a point and are

in Upper Black's Eddy, where almost all rafts stop, there being good hotel accommodations, a good eddy and a great log and lumber market. Here more lumber is bought and sold than at any other place along the river.

Below we have smart water and pass Gwinner's. At Milford, a village on the Jersey side, a lattice bridge crosses, go Pennsylvania of all the piers, follow along the shore to avoid the Lowery fish bars, for three miles, to Tanvat rift, run over to Jersey, and looking down stream we see Frenchtown bridge that crosses the river here. If we want to go Pennsylvania of Man of War Island, we have two piers Jersey of us, but if we go Jersey of the island, one pier. This is a bad place if the wind blows, and many a raft has been stove on the bridge piers.

Man of War Island was so named for the trees that once stood upon it, looking like the masts of a Man of War, but the trees are all gone having been undermined and washed away, and no trees are now on the island.

Frenchtown, N. J., is a nice, thrifty looking place, and quite a manufacturing town. It is situated in a beautiful country. Along by the island the river is wide with low banks and a beautiful stretch of water for two miles.

We soon come to Stover Island and go Jersey of the group below, except Rush Island. A little above Rush is an island that inexperienced steersmen think is Rush that they go Pennsylvania of, and invariably stick, for which they get unmercifully chaffed. Going Pennsylvania of this island is what raftsmen call running Rush before they get to it.

At the foot of Rush Island another of those mountain spurs or foot hills cross the course of the river, but this time it is a different kind of rock through which the river runs, making a rift of quick water for three miles, called Warford's. The river is wide and the water shoal, and many rafts are stuck here every time there is a freshet, unless the water is very high.

At the entrance of Warford's ripple, a rocky rift extends across from Jersey nearly to Cudbitch Island. We go between the rift and island, and also between the island and bar below, and soon come to another reef called Tumble Falls Dam. In this reef there is a break, through which a raft will go of itself. Green fore-hands are called back to steer, and after they have run Tumble Falls Dam they are praised for their skill as steers-

men; but when they find that they have been fooled they make it even by "treating" the whole crew at the first opportunity.

Once in going down on a moderate freshet, we learned, when three miles above Warford's, that the river at that place was "stuck" full of rafts. We landed, and, in company with one of the crew, walked down to see what there was at Warford's. On our way down there was a hard thunder shower, the rain coming down in torrents. Upon arriving, we found the river full of rafts, as reported, and the men who had been at work to lighten them had gone to dinner. The shower had raised the river, and while we stood looking the rafts began to move and went off without the hands, and a great many stove to pieces, and caused great loss to owners.

Passing out of Warford's, we see Point Pleasant village on the Pennsylvania side, and Point Pleasant bridge. If we are going by Lower Black's Eddy, without landing, we leave one pier Jersey; if we intend to land, we go Pennsylvania of two piers. Tohickon Creek comes in above the Eddy. The village is also just above the Eddy. The Trenton & Belvidere Railroad comes to the river, at the bridge, on the Jersey side, and the station is also called Point Pleasant.

Many rafts land at Lower Black's Eddy, and it is a common thing to secure more experienced steersmen for running a difficult place below here, and a little above Trenton, called Wells' Falls. The practice was once more general than at the present time, many of the up-river steersmen being as competent to run Wells' Falls as any one below.

The hill now closes in on our right, and the canal is a water-way directly up from the river. The bluff hides the country on the west, from view, but on the left it is open and fine, and an unobstructed view is had of it.

The water sags toward the canal, and we pass Pennsylvania of Bull's Island, and over a dam from the island to the shore, that is built to turn the water into the feeder for the Raritan Canal. There is a chute in the dam through which rafts can freely pass, for the Delaware is, by the laws of New York, New Jersey, and Pennsylvania, declared a navigable stream, and no obstruction to prevent navigation is allowed.

We pass on, on quick water, by the village of Lumberville, on our right, and under the bridge that crosses here, at the lower end

of the island, and past great stone quarries, where a large amount of stone is quarried and loaded directly from the quarries into canal boats, and taken to all the cities that are accessible by water.

We soon after pass Pennsylvania of Temple Bar, in the middle of the river, and go on good water two and a half miles to Eagle Island. On the island are trees, and below, on the Jersey side, a limekiln; keep the trees and kiln in range. The canal feeder is walled up from the river, and we run over to Jersey, but keep the limekiln in sight, and run back to Pennsylvania, and point to run Howell's Rift. At the foot of Howell's Rift, we pass under the bridge at Center Bridge (Stockton on the New Jersey side), leave one pier Pennsylvania. Below, straighten up, and have three-fourths of the river on the Jersey side. We have been in strong, crooked water, above the bridge, that requires the skill that experience gives, in order to run successfully.

We now come to Limestone Rift. We are just half way from Upper Black's Eddy to Trenton. We can now see New Hope bridge, three miles below us, and looking back we can see Center Bridge bridge. Here are rocks in the river.

We run along on slow water past Philip's Eddy on the Pennsylvania side, and bear to Jersey to the middle of the river and pass Rabbit-run Rift, and Rabbit-run Creek from Pennsylvania, head to Pennsylvania until we can see a mill on the Jersey shore, a mile below. We run to the right of all the bridge piers but one, straighten up and run close to the second pier, and we pass under New Hope bridge, and a mile below enter Wells' Falls.

The channel is about one hundred feet wide; wings have been put in on both sides to deepen it. Here, the river being wide, the water shoal, and the bottom rough and rocky, and a place where the wind blows hard at times, there is much sticking and staving. This is the place for which Wells' steersmen are hired at Lower Black's Eddy.

Wells' is a rift, formed by one more of those peculiar ledges, through which the river seems to have cut its channel, and also the last one until we reach Trenton Falls. The rift is about one half mile in length, and about as rapid as any along the river. It is difficult to describe the obstacles that are met with here,

so that the reader can get a good idea of them, but it is the place dreaded worst of all places on the river, by many.

About a hundred rods above Wells', there is a wire-rope ferry, by which canal boats are crossed, locking into and out of the river. Here is the large village or town of Lambertville on the Jersey side, and the large village of New Hope on the other.

After leaving Wells, head to Pennsylvania, to pass a point on the left, and then turn and run back to Jersey to avoid sunken rocks on our right, called Bobtails. Go to the right of Keeler's Island, below which, on the Jersey side, is Jack's Cove, and on our right is Brownsburg.

We left the hills behind us at Wells', and we now see no more of them. We now are running through a beautiful country. A nice stretch of water for a mile or two, and then pass a rift; straighten up, and we are soon at Titusville on the Jersey.

At the upper end of the village, is the wing or dam built by Washington, to form a slack-water or eddy, to facilitate the landing of the boats, in which his army crossed the Delaware, December 24, 1776, and surprised the Hessians, [hired British soldiers] at Trenton, and gained a glorious victory, January 3, 1777. (Captain Pine has fallen into several errors, as the dam of which he speaks was not built for Washington's boats. He has also confused the two battles of Trenton. The first when General Washington and his army crossed the Delaware on Christmas night (not the 24th) of 1776, and fought the first battle early on the morning of December 26. He returned to Pennsylvania with his Hessian prisoners. His second crossing was on the ice when on January 3, 1777, he fought the second battle of Trenton, followed by the battle of Princeton.)

The canal here leaves the river, and we see no more of it until it comes to the river again, at Bristol, as previously related.

As soon as we leave Titusville, we see Eight Mile ferry bridge (formerly McKonkey's Ferry). There is a railroad station at the bridge, on the Jersey side, called Washington's Crossing. Keep along Jersey until we come to the bridge, generally leave two piers Jersey of us, and after passing the bridge, are in Scudder's Pond, formed by a dam for the purpose of creating a water power for manufacturing purposes, in Trenton. The dam is built clear across the river, a chute is made for running rafts over the dam. Passing the dam we run Jersey to avoid a bar formed

by the water over the dam, straighten up and head to Pennsylvania above Yardleyville, on our right. Here is Four Mile ferry bridge under which we go, one pier from Pennsylvania, keep along that shore to the Bound Brook Railroad bridge, and go to the right of all the piers. This is a long, high, iron bridge, extending over the canal, which is about fifty rods from the river, in Pennsylvania; the river; the aqueduct of the water power, and the railroad in New Jersey.

We now see Gould's Island, and run along within forty or fifty feet of it on the Pennsylvania side to avoid some rocks in mid-channel. Below this island are several bars, on one of which, called Blackguard Island, is a fish house.

The river is wide below, and we run to Jersey until the third pier of upper Trenton bridge hides a white gristmill in Trenton. We keep this course until we pass Marble Roll, then have the mill all in sight until we pass Sunfish Ripples, and then run Jersey until the edge of the mill can be seen on the Jersey side of the third pier of the bridge, then straighten up and run close to it, lay up to Pennsylvania to avoid the Blade Rocks, and run along side an island, and leaving Trenton Falls, we are in tide water. Point to Jersey and run along to the lower Trenton bridge, leave one pier Jersey, head towards the shore, and run along for a mile, and land at the city of Trenton, the capital of the State of New Jersey, two hundred and fifty-eight miles from the head of raft navigation on the West Branch, at Frisbee's, three miles above Delhi.

TRENTON AND MORRISVILLE

The lower bridge at Trenton is a double iron bridge with two tracks side by side, one for the railroad and the other for the public.

As we come to Trenton we can now see some of the mighty forces that the Delaware has been gathering as she has been winding in and out among the hills and running through the valleys on her long torturous course, by receiving the waters of her tributaries, which she is now hurling with steady, persistency into tide water, and is yet able to make her power felt against the tide, until Delaware bay engulfs her.

As soon as a raft lands it is quickly covered with boys and old women, begging for broken pieces, the "dinner-box," etc.

There are many fine buildings that attract attention, among them the State Capitol buildings and State Prison are in plain sight from the river. The Insane Asylum, rolling mills, flouring mills, cotton factories and many other mills, are seen, including the largest manufactories of crockery in America.

There is a half mile or more wharfage where steamboats are seen tied, and sloops at anchor in the stream. Sail boats are scudding here and there, rafts are coming and landing, orders are given, all is bustle and excitement, the hands are in a hurry to get the dinner they are entitled to by custom, and anxious to get their pay, which they have well earned, and to be speeding on their way to New York City and then home again.

Opposite Trenton, on the Pennsylvania side, stands Morrisville, notable as being at one time the home of the great French General, Moreau, who was banished by Napoleon. He lived here for years, living the life of a quiet country gentleman until after Napoleon started on the invasion of Russia, when Moreau left America, joined the Russian army and was killed while heading a reconnoitering party of Russians against the French. Here, on the New Jersey side, the Assunpink Creek empties into the Delaware.

FROM TIDE AT TRENTON TO PHILADELPHIA BY TUGS

The run is ended, but the market is not yet reached, for the lumber must go thirty-five miles farther, on tide water, to Philadelphia. Rafts are now all towed by steam tugs, at six dollars each. Thirty or forty are put into a tow, and in a few hours are landed in Philadelphia. For many years rafts were drifted through tide, and often it required a long tedious time, for the raft only made progress while the tide was ebbing. When the tide began to flow, the raft must be staked down, and watch and wait was the only alternative. Sometimes headwinds would delay, or the wind would drift the raft out of its course. Occasionally, if the wind was strong and the tide high, a raft would drift on to a bar, or mud flat, and be left high and dry when the tide was out, and would remain there perhaps for weeks, or until a higher tide once more floated it. In drifting, the raft must be loosed from the "halyards" whenever the tide turned, night or day, and it was not uncommon to run a-foul of the anchor chains,

in the night, of vessels anchored in the stream, and it would be uncommon if the hardest kind of swearing was not indulged in, especially by the boatmen.

Soon after we leave Trenton, the channel is Pennsylvania of a group of islands, called Duck Islands, along the Jersey shore. Pennsylvania of the channel is Periwig Island, and still to the right of that, a large, long island close along the shore. The channel, years ago, was between Periwig and this last mentioned island. At the foot of Periwig, the current sets to Jersey, close in shore, and we soon come to Bordentown, a city six miles below Trenton.

BORDENTOWN, THE HOME OF JOSEPH BONAPARTE

Bordentown was made famous by being, for many years, the home of Joseph Bonaparte. He, as all know, was made king of Spain, and on the downfall of his illustrious brother, Napoleon, he, in common with the mushroom kings of that period, were compelled to seek safety in other countries. Joseph Bonaparte sought an asylum in America, and made Bordentown his home. He built a splendid mansion, laid out beautiful grounds, erected elegant out-buildings, including stables for his horses, that were very extensive. He had a large, beautiful park, filled with deer and game; greenhouses, conservatories, arbors, walks, drives, flowers and fruits. Everything to charm the eye or please the taste, or that money could buy, was lavished upon his home, to beautify and adorn it; and to say he succeeded is but to tell the simple truth. Here, on the banks of the noble Delaware, whose every ripple from its source to the ocean, since it has been known by a white man, has been chanting a refrain of liberty and freedom, lived this ex-king, reveling in the wealth that was brought with him, from the convents and cathedrals that were robbed to support him in the semi-royal style that he maintained. Here, too, for years he had a chance to study the great principles that underlie our system, "that all men are created equal," and "that governments derive their just powers from the consent of the governed." After the downfall of Napoleon, and France had settled down to its normal quiet, he returned to his native land, and died there. His valuable and beautiful estate remained in the possession of his descendants for years, and may yet be

held by them for aught I know. After Waterloo and the "Restoration," a son of General Murat, King of the Two Sicilies, a nephew of Joseph Bonaparte, also settled at Bordentown. He built a fine mansion, lived a fast life, squandered his money lavishly, became dissipated, and died, after a few years, leaving his young, beautiful and accomplished wife, penniless. She, more democratic than scions of royalty generally are, maintained herself by teaching music, and yet preserved her respectability. These instances, related above, practically illustrates the principle, that the United States is an asylum for the world. And here is another that better illustrates the principle that here in the United States, there is no such doctrine that kings rule by "right divine," and that:

"Honor and worth from no condition rise,
Act well your part, there all the honor lies."

David Hall, a lumberman and steersman, who lived near Hancock, went to Bordentown, about twenty years ago, and engaged in business connected with the canal. A few years after, he was elected mayor of the city of his adoption, and subsequently was made sheriff of the county. The tide rises here from four to six feet. A large creek empties into the Delaware, here, on the Jersey side. The Raritan Ship comes to the river here. Sailing vessels are towed through, and many steamboats navigate its water. A vast amount of produce, coal and lumber, are carried on this canal, and find a market in New York and adjacent cities.

The Camden and Amboy Railroad comes up the river to this place and then strikes off across the State to Amboy, on Newark Bay. A branch extends up the river and connects with the Pennsylvania Central at Trenton. About one mile below, on the same side of the river, is Whitehall, a large railroad and manufacturing town. Just below Whitehall we come to Pennsbury Island, extending along the Jersey shore for two miles. There are a number of houses on the island and several valuable farms.

A few miles below is Florence Heights situated on a high bluff on the Jersey side. There are no bluffs on the other side and from these Heights an unobstructed view is had of the country on both sides of the river for miles around. There is

located here a famous Water Cure establishment where hundreds if not thousands of invalids come every year for treatment by this system. About opposite Florence Heights stands Tullytown on the Pennsylvania shore, and Common Creek is adding to the water of the Delaware.

We next come to, and pass Pennsylvania of Burlington Island, containing six or seven hundred acres of excellent farming land divided into several farms, all with first-class houses and farm buildings.

A few miles farther on, we reach the city of Bristol on the Pennsylvania side, fifteen miles below Trenton, and twenty above Philadelphia. Here a large tributary, the Mill Creek, pours its water in from the Pennsylvania shore. This is the terminus of the Delaware Division Canal. Vast quantities of coal is brought here from the mines far up the Lehigh River, and extensive coal yards have been built to receive it. Many vessels, of all kinds, both steam and sail, and of great size are loaded here with coal, lumber, produce, etc. Any vessel that can cross the bar below Philadelphia, at the mouth of the Schuylkill, can ascend the river to Bristol. This is a large, thriving, manufacturing city.

Almost opposite, on the Jersey shore, is the beautiful village of Burlington. It is a thriving, bustling, wide awake town, and like all down river villages, the buying, selling and manufacturing of lumber adds, not a little, to its business. A creek also comes in on the Jersey side (Assiscunk Creek). A convent stands here, and it has a nice wall along its river front, to which our raft was once tied. C. Roff, of Harvard, was with us, and he will remember how the nuns of the convent were afraid their wall would be damaged by our rope as the tide ebbed, and our raft drew off, and how they raised the rope from the wall when it appeared to be catching on the stones.

Four miles below, is Neshaminy village and creek, on the Pennsylvania side. On this creek are situated mills for lumber. The creek is navigable for a distance for vessels of light draught.

About a mile below, is Beverly, on the Jersey side, called in former times, Dunk's Ferry.

Below this is a part of the river called White Sheet Bay, Horseshoe Bar and Many Island, that the channel is Jersey of, and then we see Torresdale, a Pennsylvania village.

Opposite on the Jersey side, is Rancocas Creek and village. The creek is navigable a distance of twelve miles, to Mt. Holly, the county seat of Burlington County. Large mills are here, and this, too, is a good lumber market. The tide at this point is very strong, and tug boats with rafts in tow stop and wait for the tide to begin to ebb.

About forty years ago, Eben Patchen moved from Walton, and lived four years with his father-in-law, Joseph Wall, four miles up Rancocas Creek.

Next below is Pennypack Creek and Pennypack village, on the Pennsylvania side. Old time raftsmen, who used to drift their rafts through tide, will remember this place as the old bake house. Here, in the river, are the rocks, called the old hen and chickens.

A turn, now, in the river, and Eight Mile Point is rounded, and Tacony, a Pennsylvania village, is in view. Here, in early rafting times, stood a single hotel, called Buttermilk Tavern. This was once the terminus of the Pennsylvania Central Railroad, and passengers were transferred by boats to Philadelphia, some seven miles. Now it would be difficult to tell where the terminus of the railroad is.

The next place below is Bridesburg, at the mouth of Frankfort Creek, and we are within the corporate limits of the Quaker City. Opposite Bridesburg, the Penshocking Creek comes in from Jersey. Bridesburg is noted for the extensive chemical works that are situated on the creek. The refuse of the establishment runs into the creek, and gives it the appearance of a huge coloring vat. An United States arsenal is also located here. The buildings and grounds are surrounded by a high wall, and the wall surmounted by iron pickets, and on top of the wall, besides the pickets, sentries pace to and fro constantly, night and day, keeping watch and ward over the large number of implements and the vast amount of munitions of war stored here. Philadelphia street cars run up here, and even up to Tacony, and the streets are lighted by gas.

About a mile below, a break-water appears, called by raftsmen, the Stone Wall. Along this wall are landing places, and wherever we choose can tie our raft.

PORT RICHMOND, PHILADELPHIA

We are at Philadelphia. It is just three miles from Bridesburg to Conrow's dock, Port Richmond. Along at Port Richmond, almost all the lumber is sold. This place is to the lumber market what Weehawken and other sale yards are to the cattle trade in New York. After the lumber is sold it is delivered by the seller to the slips, wharves or yards of the buyer. This work is done by the tug boats, and at the expense of the seller. The raft is then thrown out upon the dock, piece by piece, and every piece turned over. It is counted by experts, and the contents of each stick noted. It is then taken up and bunched on the dock, and from thence carted to the yard of the buyer and nicely stocked, each length and thickness in separate stocks. All this is done at the expense of the buyer. After the raft is counted, the counter gives the seller the number of feet in his raft; he presents it to the buyer, who gives, usually, his check for the amount. The seller gets his check cashed, pays up his bills and starts for home, happy in the possession of the hard-earned cash, for which he has had so much anxiety since his raft has been afloat.

One counter, two bunchers, and six hands to throw out, nine in all, make a gang, and they will throw out a double raft, or 100,000 feet, in a day.

The river at Port Richmond is about a mile wide. There are two channels, caused by a long, low, narrow island, nearly, if not quite, two miles long. Through this island two channels have been cut for ferryboats, that ply between Philadelphia and the city of Camden opposite, on the Jersey side.

Just above Camden, Cooper Creek comes into the river, the last one that we pass on our rafting trip.

Camden is quite a large city, and a number of railroads start from here and run in every direction across the State.

Philadelphia is a beautiful city, lying between the Delaware and Schuylkill rivers. Its streets are systematically laid out, crossing each other at right angles. It is the second city in size, wealth, and importance, in the United States. Its present limits far exceed its former corporate size, and has reached out across the Schuylkill, up the Delaware, back, westward, until many large places yet known by their local names, are within

its limits. For many years, Philadelphia was the first city in numbers, finance, and commerce, in the United States. But after the completion of the Erie Canal from Buffalo to the Hudson, and the opening up of the west, and the consequent diverting of trade to New York City, and the downfall of the United States Bank, Philadelphia fell behind New York, and has since remained second, and it seems to be impossible for her to equal again her more favored rival.

Philadelphia was founded by William Penn. The Old Elm stood for many years on the bank of the Delaware, where Penn made his first treaty with the Indians. This tree was blown down in 1810. We have heard old lumbermen speak of seeing it, as it stood, seeming to be more majestic for once having sheltered the illustrious Penn, and witnessed the ratification of a treaty with the Indians that was never broken while the maker lived. A marble block, fifteen to twenty feet high, still marks the spot where the Old Elm stood, bearing appropriate inscriptions on its four polished sides, commemorative of the treaty made in December, 1682, or February, 1683, authorities disagree as to date.

PHILADELPHIA IS HALLOWED GROUND

Here stands old Independence Hall. Within its walls the words were spoken that brought a mighty nation into being. Words that have been an inspiration to the toiling, down-trodden millions of the earth. Words that have been ringing in the ears of monarchs, heard in the mansions of the great and powerful, and whispered in the hovels of the poor. Reverberating across rivers and oceans, over mountain and plain, for a hundred years, declaring the universal equality of man. Here, in old Independence Hall, Thomas Jefferson and his compatriots gave to the world the grand declaration, "That all men are created equal," and endowed by their Creator with certain inalienable rights, and among these are, "life, liberty, and the pursuits of happiness." And to secure these ends governments are instituted among men, divining their just power from the consent of the governed. One entire floor of Independence Hall is filled with relics of 1776. Here we can see life-size portraits of all the signers of the Declaration—pictures of the men who "pledged their lives, their fortunes and their sacred honor."

Here, too, can be seen the chairs in which they sat, the desks on which they wrote, the inkstand and the pen that wrote the immortal Declaration, the pew in which Washington worshiped. Here, too, can be seen the old Bell that rang out the grand peal of Liberty. Here, too, can we see the portrait of the old bell man, with his hand upon the rope, with an expectant, waiting, anxious look upon his face, ready so soon as the result of the deliberations of Congress were made known to him, to make the old bell ring as it never rang before. And right well did he perform his part in the national drama. Independence Hall is a very high building, and at the top an observatory, the last flight of stairs leading thereto going directly through the City Hall clock. The machinery of the clock can be plainly seen, including the ponderous hammer that strikes the bell that tolls out the hour to all the inhabitants of the city. The hammer is as large as a blacksmith's sledge, and its strokes upon the huge bell can be heard on the river for ten miles. The old Hall now occupies a block from Chestnut street to Walnut, above Sixth street. It has been enlarged by additions, to make room for the courts. The city, supreme, sessions, and police courts, are all held here. And as the city prison is at Moyamensing, the "Black Maria" (the van in which prisoners are conveyed to prison) makes daily trips to and from the Hall to Moyamensing. And in 1865, Independence Hall held, for a while, a patriot equal to any that it ever sheltered—Abraham Lincoln, our martyred President, who lay in state within its walls. Fitting and appropriate place, for there the Declaration was made that all men are equal, and to Abraham Lincoln do we owe as much as to any of the patriots who had gone before him, that the equality of all men is acknowledged all over this broad land.

All about Philadelphia is historic ground.

What is now within the city limits, on the northwest, was Germantown; where the disastrous battle was fought, October 4, 1777, that gave the city to the British, and gave snug, warm quarters for their army, and compelled Washington and his patriot army to winter at Valley Forge. The old stone house is still standing, in which the British soldiers took refuge, and turned the tide of battle against the Americans, showing yet very plainly the marks of the conflict.

The reader must remember that Philadelphia is a large city,

second only to one other in the United States, yet first in one thing—manufactories. No attempt, therefore, has been made to describe but a few things in connection with it.

On Chestnut street stands the old United States Bank building. And the readers of history will readily call to mind the fierce political conflicts that were waged for and against the financial policy which the United States Bank represented. They will remember the wrath and indignation caused by the removal of the "deposits" by an arbitrary exercise of power on the part of President Jackson. The building is now used, and has been for years, for a Custom House, and millions of dollars of governmental revenue are annually collected there.

The postoffice was kept for many years in Independence Hall, but now it is kept in a magnificent structure erected by Uncle Sam for that express purpose.

A shot tower of fabulous height vies with the observatory of Independence Hall, in reaching heavenward.

In the heart of the city stands a little house built of cedar logs. It was one of the first structures built when the city was founded. It stands in an enclosed and covered court to preserve it. Within it can be seen the fireplace, the crane, hooks, andirons, and all the cooking utensils and furniture, in use in ye ancient time.

One thing more: The United States Mint is located here, where nearly all the hard money of the United States is coined.

Lumbering on the Delaware is a business of vast proportions. Several thousand men go down the river on rafts every year, and more than double the number of men are employed in rafting, and other thousands are employed in peeling, cutting, skidding, hauling, sawing, stocking, etc. It also requires carpenters, millwrights, axes, chains, teams, sleighs, wagons, saws, bars, augers, etc., furnishing business for canals, railroads, steamboats, dealers, and to hundreds who keep raftsmen.

We have now taken you, reader, all the way down the noble Delaware, but it has mostly been a fair weather trip. We have not spoken of the rain, the snow, the cold, and the discomfort that must be endured, for rafts can only be run when there is water enough to float them over the shoal places, so that when a freshet comes the rafting must be done, rain or shine, snow or blow, and many an one who, perchance, may read these lines,

will remember the long, weary days of rafting, in rain or snow, and the relief, when tired, wet and hungry, the close of day brought rest and refreshment. The discomforts experienced on the river, by being exposed to storms, the snow squalls, the showers, the run all day long, in drenching rain, the sudden change, sometimes to cold, the wet clothing freezing, the benumbed fingers, the occasional douse in the ice-cold water, the jump into the river to lift off the raft, and as you bend down for the lift have the water run over your back, you may remember the chill that seemed to go to the very marrow of your bones, and then when night came, the raft landed and securely tied to shore, you may have been compelled to walk a mile or two to find supper and shelter. The fitful night's sleep, and the putting on of the wet garments in the morning, and last of all, the pulling on of the wet, shrunken boots. The kicks, the stamps, the broken straps and curses that this last act of dressing causes, are beyond computation. But, once more afloat, it is all forgotten in the duties of the present, and anticipations of the future.

And now, dear reader, we have built a raft, manned it, loosed it from the shore, gone with it to Philadelphia, about three hundred miles, a long tortuous route, through wild, grand scenery, some of it yet unchanged and untouched by the hand or art of man, through stretches of beautiful, cultivated country, past high mountains, through lovely valleys, past marts of trade, by busy manufactories, along railroads and canals, past quiet and peaceful farm houses, to and by places of historic interest, for the lower waters of the Delaware have been singing a requiem, for a hundred years, for the patriotic dead,—for pioneers who fell victims to the wrath of the red man, or gave up their lives on the altar of their country.

We have taken you under forty-five bridges that span the Delaware, past eighty-five hamlets, villages, towns and cities on its banks, past many islands that we have called by name, and many more we have not named, and many that have no name, and have named and located one hundred and eighty-four creeks or tributaries.

Our task is done and we bid you good-bye, wishing peace, prosperity, and long life to the readers of the *Chronicle* and the raftsmen and lumbermen of the Delaware.

A Story of My Branch of the Longshore Family

By MRS. LUCRETIA L. BLANKENBURG, PHILADELPHIA

(Doylestown Meeting, May 7, 1932)

ROBERT LONGSHORE, a surveyor from England, helped as a deputy surveyor to make the plans and survey of Philadelphia in 1682. He married Margaret Cock, the daughter of Pieter Larson Cock, a Swede, who came to America in 1641. Pieter was collector of tolls, imports and exports for the colony, also a magistrate for New Sweden and later, deputy governor. Robert Longshore, gentleman, purchased 500 acres of land in Bristol Township, Bucks County. Euclidas Longshore, the son of Robert and Margaret Longshore, was my ancestor.

Euclidas Longshore married Alice Stackhouse, a girl of 16 years, daughter of Thomas Stackhouse and Grace Heaton of Bucks County, January 8, 1715.

Euclidas Longshore, Jr., their son, my great-grandfather, was born April 27, 1735. He married a Miss Cox for his first wife—issue 11 children. The initial letter of all their names was A. Euclidas Longshore afterwards married at the age of 45, Sarah Gillam, daughter of Lucas and Ann Dungan Gillam, 28 years old—May 11, 1780—issue 11 children. The fourth child of this marriage, Abraham, was my grandfather.

Abraham Longshore married Rhoda Skelton, daughter of Joseph and Mary (Carey) Skelton, of Solebury, in Bucks County, March 11, 1807—issue 11 children. My father, Thomas Elwood Longshore, was the fourth child, born November 11, 1812; died August 19, 1898. It is from his life sketch that these notes are copied.

FROM NARRATIVE OF THOMAS ELLWOOD LONGSHORE
(DATED JAN. 10, 1891)

Euclidas Longshore, our grandfather, from impressions I have received from different members of his family, was rather an easy, good-natured man, with a sense of dry humor. He was of light complexion inclined to sandy with brown or light hair. At the time father, Abraham Longshore, was born, 11 mo. 6th,

1785, the family was living in a stone, one-story house, north of John Watson's farm in Middletown, Bucks County, on the south side of the road, that ran south of Newtown from the Neshaminy to Jenks' fulling mill. It was a small farm, with an orchard near the house. Our uncle Euclid used to point it out to me as the place where they lived. Grandfather was not much of a farmer. Things drifted anyhow. It was while he lived there that Mr. Wildman (Mahlon perhaps) who occupied the Stacy Watson farm, wrote and sent him the following:

Neighbor Clyde, I can't abide
The cow that wears the bell,
She was this morn within my corn
How long I can not tell.
(The damage done a serious one
Of which I now complain.)
It will be worse for you and us
If she gets in again.

Grandfather was road supervisor for many successive years.

It was probably after grandmother received a small legacy from the estate of her father, Lucas Gillam, that they purchased some 60 or 70 acres of the old farm, with the old stone kitchen and log house adjoining, where we were born. Grandfather ended his days there. The land was so very poor and barren, it did not pay to farm it.

The family was so poor that the children went out to live as they grew large enough. Father told me, that he left home and went to James Wildman's to live when he was about 12 years old. He did not get along satisfactory with old Adam Adams, their colored hired man, and refused to thresh in the barn with him, because he abused him. He told James Wildman of his bad treatment, saying that he would not work with Adam. James told him if he was not going to work again, he must go to bed and stay till he was willing to go to work. Father went to his bed and lay there the remainder of that day, all night and towards evening the next day, when some visitors came to the house, and Rachel Wildman, Jr., then a baby in the cradle, cried and all were too busy to rock the cradle, whereupon her mother called father from his bed to come and rock the cradle. This was the winter of 1793 when father was 14 years old. In the spring he left Wildman's and returned home to farm for his

father. He sowed four quarts of clover seed which he persuaded his father to purchase, and for the first time cut a little clover hay. It was sown on about an acre of ground in the northwest corner of the barn-field, over what we used to call Guy's Spring Run. During the two years he stayed at home, he did more farming than his father had ever done.

In the spring of 1802, he went to learn the trade of wheelwright, and was indentured to a man by the name of George Walker, who lived and had his shop in Attleboro (now Langhorne), near where Dr. Allen's house stood. Walker owned all the square inclosed in the quarter-mile roads that surrounded it on the north side of the village. Father remained with Walker one year, during which time he kept a diary of every day's work. He did little or nothing in the shop, but did the farming and outdoor work.

At the end of the year he went home on a visit; took his diary with him, and showed it to his father, stating that he did not want to return as he would never learn his trade there.

His father told him to take his diary to Esquire Isaac Hicks, father of Edward Hicks, the Quaker preacher at Newtown, and ask his advice in the matter. Esquire Hicks examined it and told him to go about his business, and that he need not go back to Walker if he did not want to. He did not return but engaged with Charles Goheen, a wheelwright, who lived in the east end of Attleboro.

Father remained with Goheen some three years, learning his trade. Goheen had two bad boys, Dick and Jim, who gave him some trouble. When their father was away, they would be in the shop annoying and interrupting father at his work, and sometimes doing mischief; for which father was held responsible.

Goheen told father he would hold him accountable for any disorder or damage in the shop when he was away. Father then undertook to carry out his instructions and by force, kept the boys out of the shop; handling them roughly. They made great complaint of his abuse and cruelty towards them. This produced some dissatisfaction, and things did not work harmoniously.

Father had no way to get any spending money without doing extra work. He therefore engaged a farmer to bring to him at the shop some tough, crooked, white oak stump roots. Mechanics and apprentices then worked at night till 9 o'clock from October

to April. Father purchased some candles and from 9 until 10 o'clock hewed and sawed out harness hames out of the oak roots for the farmers. He had them seasoning, and ready for sale, but kept them out of his master's sight.

One day a farmer came into the shop to inquire for, and buy, some hames. Father, in the presence of the boss, brought out his hames and made a sale. This displeased Goheen, and he told father that his shop was not large enough for two men to run separate businesses, and if he continued to carry on, he must leave and find some other place. This naturally angered him, as he had been some three years at the trade, but he was not master of some of the particular branches. He left, however, when about 20, went to Newtown, rented a shop, hired a capable workman and opened for himself. It was during this first year in Newtown that he became acquainted with the maiden who became my mother.

Shall I say, that he and some other Quaker boys of the neighborhood concluded to ride on horseback to Buckingham Quarterly Meeting, which was held in the last of May?

They remained over night and were invited by Friends to dine, and then go where there were some young folks. There were several at Grandfather Skelton's, where they called, and the girls were buxom and friendly and treated the lower end visitors with cordiality.

This was in May, 1806. In the 3rd month 11th, 1807, they, father and mother, were married, rented a house and commenced life in Newtown.

Grandfather Euclidas had died 6th month 14th, 1804, when father was in his nineteenth year and serving his apprenticeship with Charles Goheen. At his death the children were scattered. The boys stayed out till they were 16 years old.

Our uncle Euclidas lived with uncle Simon Gillam while father was learning his trade and till he got the farm and moved to it from Newtown. The old farm where we were born was sold at public sale and James Wildman bought it for about \$25 or \$28 per acre. The farm was so poor, that it lay idle or nearly so for two or three years.

Father and mother lived in Newtown two years, when father purchased the old farm of James Wildman and moved there in the spring of 1808 or 1809.

Sister Sarah Ann was the only one of the children born in Newtown, viz., on December 26, 1807.

Grandfather died in 1804, eight years before I was born. When father moved on the old farm, he could get practically nothing from it. He built a small frame shop, north of the house under the big cherry tree, and followed his trade for a living. He hired a journeyman by the name of Twining to do jobbing for wagon work for farmers. There was no barn on the place and no use for one; but father traded around, got some lime, collected a little manure and gradually began to raise little crops. Uncle Euclidas was with him as farmer.

In 1813 father found he would soon need a barn, and in the spring began to build one, and his neighbor laughed at him, and told him he would never fill it. It was built of stone, 40 feet long by 27 feet deep and 20 feet up to the square.

Grandmother was living down by the spring in a little one-story frame house. I remember when, in my petticoats, running down the road to see her. It was in the summer of about 1815. She was sitting in her big arm chair, with a clean check apron and cap on and with spectacles, reading the Bible or some religious book, probably a hymn book. She was quite religious and used to sing hymns and chant from the Bible. I remember the solemnity of her funeral which I attended the next year.

Father borrowed \$1,000 when he bought the farm; and it was often with the greatest difficulty he could raise money to pay the interest. I remember how they talked about it and how we all had to do what we could to save money, by living poor and dressing in poor patched homespun clothes, eating mush, rye bread without butter or molasses or even lard; tea or coffee without sugar, also rye pie, shortened with smoked pot-skimmings and sour dried apples, but we made the less of it answer.

About the year 1811 Uncle Thomas Longshore came to father to learn wheelwrighting, and in 1813 Uncle James Longshore also came to learn the trade. They quarreled and both left one or two years before reaching 21, when they would have been free. Uncle Thom went to Logtown (now Pennsville) where he married Aunt Jane (Jane Gaine). Uncle Thom set up business there and for a time Uncle James worked with him. James married Aunt Sarah Roberts and then opened a shop of his own north of Penns-

ville. He lived with us from 1815 to 1816. In the spring of 1822 father tore down the old log house and built a new house of stone. This is still standing and is now occupied by a gentleman farmer, by the name of Branson, who raises stock.

I was then nine years old; was kept from school and put to work tending stone masons; I worked with the men at the house all summer and helped to carry mortar in a bucket for the plasterer. Brother Carey and I did most of that tending. The remembrance is vivid with me yet; how steady I worked those long warm days and how tired I would get. The masons worked from sun to sun. Their names were Joseph Reeder, Enos Reeder and Tom Scout (Aunt Aby Minor's son) by her first husband. Father hired an old man by the name of William Steward, to boss the carpenter work, and father worked with him as carpenter also, all summer, until the house was finished.

Thomas Scout built the stone shop at the corner of the south yard the next year, and I was tender again for the mason.

By this time the farm produced more than the barn would hold, and we built barracks and stacked some of the grain; but the debt remained on the farm, as the money coming in was all spent in improvements.

I have heard father say that the most schooling he got was three months when about 16, before he went to his trade; however, he learned to read and write and cipher as far as practice, through single rule of three. The Bible and Testament were the school reading books, as they also were when I first went to school to Thomas Byles at the eight square school house (octagon built of brick), by Wildmans from 1817 to 1818.

While father was at Goheens learning his trade he heard of a new school book just published by Lindley Murray, called the "English Reader"; and he spared the money to purchase one for his own use.

Father had a natural taste and turn for reading, with a desire for knowing and being somebody, with very little opportunity for either. He had a personal pride, and told me that at one time (I believe while at Goheens) he had committed to memory and could sing one hundred songs. In those days the young people would collect in companies, and on first day afternoons, spend hours around the Spa Springs, sitting on benches, singing

and sporting their time in amusement. Father would sing and Edward Hicks would preach, and make them cry.

His young manhood was short. He married about three or four months after he was 21 years old. Mother was 23.

I recollect very well how often he would tell us boys, when playing around on first days, that we ought to get our books and read, learn something; and not always remain blockheads, and be know-nothings, in the world. He would read Bible stories to us on first day afternoons and try to interest us.

During the year 1819 while we were living in the old one-story log and stone house, Eliza Slack, a cousin, a few months older than Sister Sarah Ann, came to live with us. She and Sarah did the housework week about, one would milk and take care of it and the other get breakfast and supper. They both had their spinning wheels and tasks to perform afternoons and evenings.

We children often would play and have what we called fun, when father and mother were away or visiting. Father paid Eliza 25 cents per week. When she left us, she went to John Blakey to see if she could go to Friends School to be educated for a teacher out of the charity fund of Friends. They took her into the school in that way.

The Longshores, with few exceptions, were plain working people. They scattered from Bucks County. The record gives some living in Northern Pennsylvania, Philadelphia, Virginia, Alabama, Louisiana, Ohio and Colorado. There is little known of their achievements. In closing his sketch, father says:

What we, Abraham Longshore's children, have inherited of his extremes of character have been somewhat checked and tempered by our mother's quiet, solid, hard sense; simplicity of character, native honesty and earnest, practical goodness. She not only gave us of these as an anti-natal legacy, but conscientiously labored to train us as best she could in the lessons and habits of earnest, honest, sober, industrious man and womanhood.

I remember in my early childhood of the earnest, emphatic lessons she impressed upon us about our conduct, our habits, our associates, our language: about cursing, swearing, stealing, lying, cheating or doing anything wrong to ourselves and to one another.

These early, maternal lessons have ever been remembered and heeded, through all these sixty subsequent years. They have helped to preserve me as I am.

We children have inherited these traits from our parents in different proportions; making us look at life and its purposes from different points of vision, and to feel ourselves impelled to different pursuits.

When young, as a boy, plowing and teaming, as well as alone at work on the farm, I was given to meditation, to thought, and speculation. I saw so much and felt so much, that was not good and pleasant, that life itself became a study and miracle that overwhelmed me with embarrassment.

I thought, read, studied, wondered, vowed and promised myself, if ever I lived to be a man, I would not do as the multitude, the blind, unthinking, deluded, infatuated masses were doing.

I have in a measure lived to fulfill my promises and pledges in boyhood. I wanted to know what was best and true and live up to it as near as I could.

I was the first in the family to embrace anti-slavery, total abstinence, non-resistance, woman's rights, hygiene in diet and to work for the enlightenment of others. All our family finally came over in part to these views. My life has been a very different one from any other one of the family. I helped to make brother, Doctor Joseph, a temperance man, and so saved him; for he drank entirely too much.

In 1846 Brother Joseph held a temperance meeting in Langhorne. He was arrested for disturbing the peace and fined \$50.00 by the court. The Judge left the courtroom three times during the trial to get a drink. As Joseph was a member of Society of Friends, the Friends looked up his case, found him not guilty of the charge and the fine was remitted.

Personally, Sister Sarah Ann and I had the most severe training in domestic economy, and in the most rigid restraint of poverty, against waste, expenditure and personal gratification.

I inherited neither health, strength, or genius. Have suffered not a little from overwork, hardships and exposures, and want of a capacity every way to make life a success. So I managed to get a matrimonial union that has supplemented my deficiencies; have outlived all my brothers, yet had the least vital capital. I

have tried to take care of myself, more than they, and am now in my seventy-ninth year.

FROM THE FRIENDS INTELLIGENCER

Thomas Ellwood Longshore was born 11th month, 11th, 1812, on a farm, in Middletown Township, Bucks County, Pennsylvania. Died 8th month, 19th, 1898, in Philadelphia. Later his autobiography states:

"I learned to read, write, and cipher before my tenth year. At sixteen I bought a grammar book and commenced to study at nights, and whenever I could snatch a moment. I longed and begged to go to school to get an education, that I might do something other than farm work, but father thought he could not spare me.

"I was a ready reader, and winter evenings before I was twelve years old I had read aloud to the family the two volumes of George Fox's Journal. The religious impressions I then received have remained with me through life. I read and studied Barclay's Apology before I was twenty.

"The division among Friends in 1828 had just taken place and I read Elias Hicks' sermons carefully, and much of the controversial Friends' literature of that period with interest and eagerness. Among the books I read was Clarkson's Life of William Penn, Clarkson's Portraiture of Quakerism, and his writings on the Foreign Slave Trade, The Life of Dr. Benjamin Franklin, The Life of Columbus, The Lives of the Signers of the Declaration of Independence."

At twenty-one he helped to organize a debating society which held its meetings at the cross roads school house of his neighborhood and there learned to speak in public.

Not being robust and having a distaste for farm work he left home at the age of twenty-three. He went to Baltimore, Washington, D. C., and on to Ohio, walking most of the way. In a Friends settlement at New Lisbon he obtained a situation as a teacher. There in 1835 he became a Garrisonian Abolitionist, and met Hannah E. Myers to whom he was afterwards married.

In 1841 he with his wife returned to Bucks County, where he again taught school. To quote further:

"When my wife knew the 'Female Medical College,' now 'Woman's Medical College,' was to open soon, she commenced a systematic course of study in medicine. In the Autumn of 1850 we moved to Philadelphia. In 1851 she graduated as a medical doctor. Up to 1865 I was engaged in various ways in connection with my wife in her practice of medicine, doing

the clerical and not a little of the practical part to help on with the work she had undertaken.

"About the year 1872, when our success seemed secure and our circumstances were more independent, having the leisure I commenced a course of scientific reading, embracing social science and moral philosophy, and their connection with religion and ecclesiastical history.

"I procured several histories of the Christian Religion, ancient and modern, and have read them with care to learn all of value I could on this subject.

"There was to me a mystery in what passed for religion and I wished to solve it if possible. It has been a matter of surprise to me that so few people know anything of value in regard to this history, and are so content with their ignorance.

"Some fifteen years ago I was a regular contributor to 'Friends Journal,' published by Dr. Joseph Gibbons of Lancaster County, of articles that startled the readers and excited opposition from several writers. These writings were based on the historical and scientific facts that I had accumulated.

"For several years I spoke in our public meetings, holding up the principles of Christianity as I found them spiritually explained in Christian history. My knowledge has been obtained from undoubted orthodox sources, and all the views I have ever made public were well grounded in history, and supported by recognized authoritative scripture expounders, views that cannot be refuted. When 'Friends Journal' went out of existence, I sent a number of articles to a New York liberal paper, most of which were printed.

"In 1891 I published these articles in a volume entitled 'The Higher Criticism of Theology and Religion.'"

Prior to this he wrote and published George Fox's Interpreted, also numerous tracts on religion.

His acquaintance with Friends literature and religious history gave him broad views. As a speaker in the Society of Friends his communications were often too advanced to meet popular approval. Those who understood and appreciated his ministrations attribute to his efforts in large part the present awakening among Friends.

He was a philanthropist and reformer. For years he had been a regular contributor to several religious and secular papers. His writings were chiefly on Peace, Temperance, Labor and Woman Suffrage.

His business dealings were always honorable. He was just too consistent to take the advantage of the ignorant or one whose necessities were great.

His private life was without a shadow.

His wish and desire was to be helpful, and in a modest way he tried to make the world a little better.

The children of Thomas E. and Hannah E. Longshore were Charming Longshore, M. D., and Lucretia Longshore Blankenburg, the author of this paper, wife of Rudolph Blankenburg (now deceased), mayor of Philadelphia, 1912-1916.

Restoring Old Pictures

BY DR. ARTHUR EDWIN BYE, HOLICONG, PA.

(Doylestown Meeting, May 7, 1932)

UP until comparatively recent times the art of painting was always regarded as a mystery. As a skilled craft, its secrets were carefully guarded by the old masters and handed down through the centuries from master to pupil. It took years of apprenticeship for a pupil to be initiated in the method of the master, and the layman was not admitted to the profession.

The restoration of old masters was even more of a guarded secret—even looked upon by many as a Black Art. Viewed in the light of present-day science, there were good reasons for this. The methods of old restorers were dangerous, even pernicious. For instance, raw potatoes were considered good for cleaning off dirt. It was also a general custom to repaint whole parts of a masterpiece instead of laboriously striving to preserve the original surface. No wonder the restorers kept their methods to themselves.

But, on the other hand, it is equally dangerous for unskillful persons to tamper with fine pictures. The average person cannot know that using raw potatoes, bread crumbs, or any vegetable substance will start a fungus growth in the minute cracks of the paint. Also he does not know that rubbing pictures with oil (olive and linseed oil) darkens them, that shellac causes immense cracks and water will loosen the priming ground of the canvas.

When I first began the study of restoration of pictures, there were no published books on the subject. I had to glean what I could of the history of the art of restoring from some few scientific papers, or references in technical books of general nature. I learned entirely from study with older professional restorers and from experience. In this profession experience is the only sure teacher, for every picture is a new problem, no rule can apply to every one, and only years can give one the resourcefulness to diagnose a case correctly and to apply the remedy.

Paintings are in many ways like people. They have their



SALOME WITH THE HEAD OF JOHN THE BAPTIST

Before restoration, showing the head painted over with fruit



After restoration, showing its original condition

vicissitudes in life, changes of climate affect them; accidents occur; they become physical wrecks or suffer chronic diseases. But, unlike people, they can be rejuvenated and given an entire new lease of life. For a fine picture, painted in the methods of old masters, is composed of durable materials. The pigments themselves are imperishable minerals. It is the wooden or canvas background that becomes diseased, or the protective varnish which disintegrates. The business of the picture-doctor is to treat the background, or to remove the varnish, renewing both if need be, thereby preserving the actual pigments in all their brightness and freshness. The artist's actual work need never be affected, unless, by accident or carelessness, his pigments have actually fallen off in places, or been rubbed off by unskillful scrubbing in the past.

Pictures are generally painted either on wood panel or on canvas. The early Italians preferred poplar, while the Dutch used oak. Poplar, or soft woods, become worm eaten in the course of time, unless they have been treated, and they warp. Oak panels also warp and twist. Atmospheric changes greatly affect them. In our dry houses they shrink to so great an extent that the paint on top, which does not usually shrink, blisters and falls off. There is only one way to prevent shrinkage, and that is to plane down the wood on the back until it is too thin to be affected by atmospheric changes, and then apply it to three-ply board. Sometimes paintings are actually transferred from wood to canvas to prevent crumbling. To prevent warping panels are "cradled" or braced by strips of wood glued to the back longitudinally with the grain, and containing slots through which other strips are inserted transversely, holding the panel flat. The effect in the back is that of a gridiron, or lattice work.

Canvases, of course, have other troubles. They become torn,—how many of them have the traditional bayonet hole! Particularly family portraits, which some soldier, barracked in the old mansion, spitefully insulted! Canvases even become rotten, tear out of their frames, crumple up and fall to pieces. These must be lined with new canvas. The old method of lining was to use an adhesive mixture of glue with rye flour or glue with rosin. There were various recipes, all of them implying a medium which became hard and brittle, subject to the effect of dampness and atmospheric change. My method

is to use melted wax mixed with resinous preservatives, applied while hot, and ironed in, not only perfectly flattening the picture, but preserving it for many generations.

It is an eighteenth century and erroneous idea to believe that an old painting should be yellow, or dirty. The artist who made the picture never intended it to be so. That yellowness, that obscurity, is due to old or disintegrated varnish. When that is removed, and replaced by a new protective film, the picture becomes again as the artist left it.

The discovery of a safe method of removing old varnish is due mostly to a Munich professor, named Pettenkofer, who placed the picture in an air-tight box, in the bottom of which a blanket soaked in alcohol was placed, the fumes of the alcohol melting the varnish and refreshing it. But this method did not thoroughly clean a picture and today other means are used. Among these is the friction method, the varnish, being actually rubbed off with the hand. But this can only be done with mastic varnish. The most general method is the use of solvents—a wide range being used, varying in strength, according to the age of the painting.

The age of a picture, its genuineness, or whether it has been overpainted, can often be determined by a quartz lamp which changes the colors in certain ways. For example, old white is affected differently from modern white (zinc white). The X-ray will also assist, for, as I said before, old pigments are hard, like minerals, and show up like the skeleton of the body, while the new paint is soft and faint, through which the rays easily penetrate. The X-ray has frequently revealed a different painting underneath the surface of another one.

This leads me to mention one or two interesting cases in my experience. Restorers often have surprises; sometimes they are pleasant to the owners, often not! Once I had a so-called self portrait of van Dyke put in my hands to restore. It was of a young man in a grey cloak. When I cleaned it, much of the resemblance to van Dyke came off, and a part of the cloak, revealing a splendidly painted hand holding a long halberd! It was a study, undoubtedly by van Dyke, not of himself, but of a halberdier.

Another time I cleaned a painting by Carlo Dolci. It represented a beautiful young woman holding a huge salver of fruit.



Before restoration, showing the repaint



Showing same one-fourth restored

"MADONNA AND CHILD"



RESTORED, BECOMING A MADONNA AND
CHILD, BY MURILLO

The fruit seemed suspiciously new. Carefully I cleaned it, discovered finally that underneath was a gory human head. The subject was Salome with the Head of John the Baptist. A former owner had disliked the gruesome head and employed an artist to paint a bunch of fruit over it.

The most startling case was that of a three-quarters length portrait of a lady with a child in her lap. It was supposed to have been painted by a famous French painter about 1775, and to represent the ancestress of one of our most distinguished families. But obviously it had been considerably damaged and restored by a botcher, who had muddled the hair and costume in a frightful way. I was commissioned to take off the previous restoration, and to bring back the original quality of the great master's work. I began at one corner and found that underneath the red curtain background was a stone wall with ivy. Then I stopped, and, for the sake of record, had it photographed. This accomplished, I went ahead. The clothes of the baby came off, then the costume of the lady and her jewelry. At last I uncovered a perfectly preserved and marvellously painted Madonna and Child. An ancestress and a baby ancestor had been lost, but a masterpiece recovered! Why the outrage had been done to so fine a picture is still a mystery. Fortunately the family was pleased with the result.

Not always are results such a shock to family pride, and often the restorer is able to discover signatures, dates, inscriptions, coats of arms, and other data which identify the portraits as long-lost ancestors. One such case revealed a coat of arms in the upper right hand corner of the picture, and below, near a skull, which stood on a table, the date 1646, the artist's monogram and an inscription, "Hic gloria mundi," while on a Bible, "Hic gloria aeternum" was written. Subsequent genealogical research proved that the arms were those of the Lawley family and that the portrait was of Sir Francis Lawley, baronet and D. D.

The Moland House, Washington's Headquarters on the Neshaminy, Historical Address

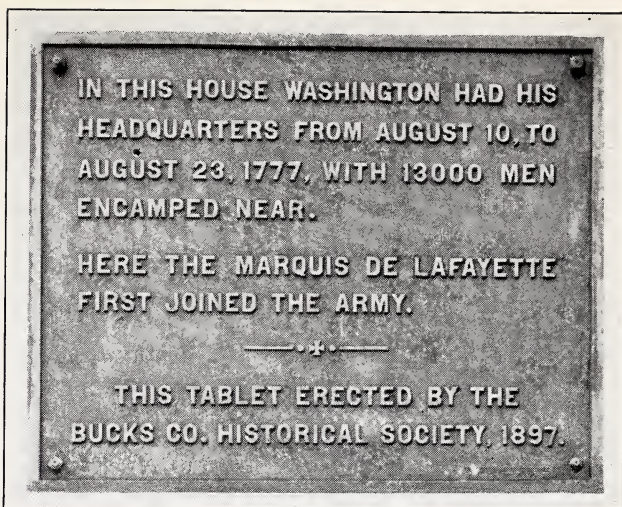
By COLONEL HENRY D. PAXSON, HOLICONG, PENNSYLVANIA

(Delivered on May 19, 1932, at the Moland House, Washington's headquarters on the Little Neshaminy, Bucks County, Pennsylvania, on occasion of the visit of Distinguished French Educators, Officers and Men of the French Naval Reserves, at the Lafayette College Centennial Celebration, Easton, Pennsylvania.)

THE President of The Bucks County Historical Society, Distinguished French Guests, Members of the Faculty of Lafayette College, Ladies and Gentlemen:

I esteem it a great honor and privilege to be asked to come here today to extend cordial greetings and a hearty welcome to Bucks County. This request comes from the President of The Bucks County Historical Society, dean of our Bucks County historians and foremost citizen—Dr. B. F. Fackenthal, Jr. As he is your host today the honor and distinction of addressing you should have been his, and if I felt there would be no other opportunity for him to speak to you, I would be loath to accept this pleasant office which he so graciously has accorded me. The welcome I extend is three-fold—on behalf of The Bucks County Historical Society, on behalf of the Washington Crossing Park Commission, and, I think I may be permitted to say, on behalf of all of the good people of Bucks County.

Your host has brought you to an unpretentious but historic edifice—the Moland House. This was the headquarters of General Washington, or rather I should say, it was one of his headquarters. If that were all of the story, its interest would not be so outstanding since Washington had three other headquarters in Bucks County which are still standing, and when we go beyond our borders, Washington's headquarters are legion. A few years ago, when motoring through the country, I observed at a tea house a sign which read, "This is a House at which Washington did not stop." That which makes these headquarters of surpassing interest is the fact that here in this house, on the 20th day of August, 1777, General Lafayette presented his credentials to General Washington, and first joined the American Army. A few days later he unsheathed his sword to aid us in our struggle for Independence.



THE MOLAND HOUSE

Washington's Headquarters, August 10 to 23, 1777, with tablet outlined on the eastern gable inscribed as shown above

Gentlemen—your itinerary today is a crowded one, and the schedule allows me but ten minutes in which to address you. For a moment I would like to draw the curtain on the Moland House and give you, in the briefest way possible, the background of facts leading up to what took place here.

The drama of the American Revolution opened in New England; it was mainly fought on Pennsylvania and New Jersey soil; it ended, practically ended, in victory at Yorktown. Bucks County's more important part in the Revolution begins in the month of December, 1776. Down to that time Washington had lost more battles than he had won. Following the disaster at Long Island we see him with his defeated, discouraged, and almost naked army, retreating through New Jersey and seeking shelter here on Bucks County soil, on the west bank of the Delaware. Here he spent seventeen days, December 8th to December 25th, his men with him at that time scarcely totaling 6,000, many of whom were unfit for duty. Washington, having brought with him to the Pennsylvania shore all of the boats and river craft, the enemy waited on the opposite shore of the Delaware for the waters to freeze so that they could cross, march through Bucks County, and seize Philadelphia, our capital. Philadelphia was panic-stricken, many of the inhabitants left the city, and Congress, which had been sitting there, picked up its papers and fled to Baltimore. Washington's men had suffered defeat after defeat, were discouraged and ready to go home. This has been described as the darkest hour of the Revolution and Washington at the Keith House, in Upper Makefield Township, wrote his brother, "I fear the game is nearly up." Then it was that over there at McKonkey's Ferry was born a new and desperate courage which bore fruition in the brilliant victory at Trenton.

On Christmas day at night, Washington with 2,400 men crossed the swollen waters of the Delaware River, filled with floating ice, forbidding the approach of man. It was a hazardous undertaking requiring nine hours. Then in the face of a blinding storm of snow and sleet they marched nine miles to Trenton, surprising Colonel Rall, the Hessian Commander, and his 1,400 men, and after a spirited but brief engagement made them lay down their arms. The Hessian Commander was killed. Washington and his army then retraced their steps the

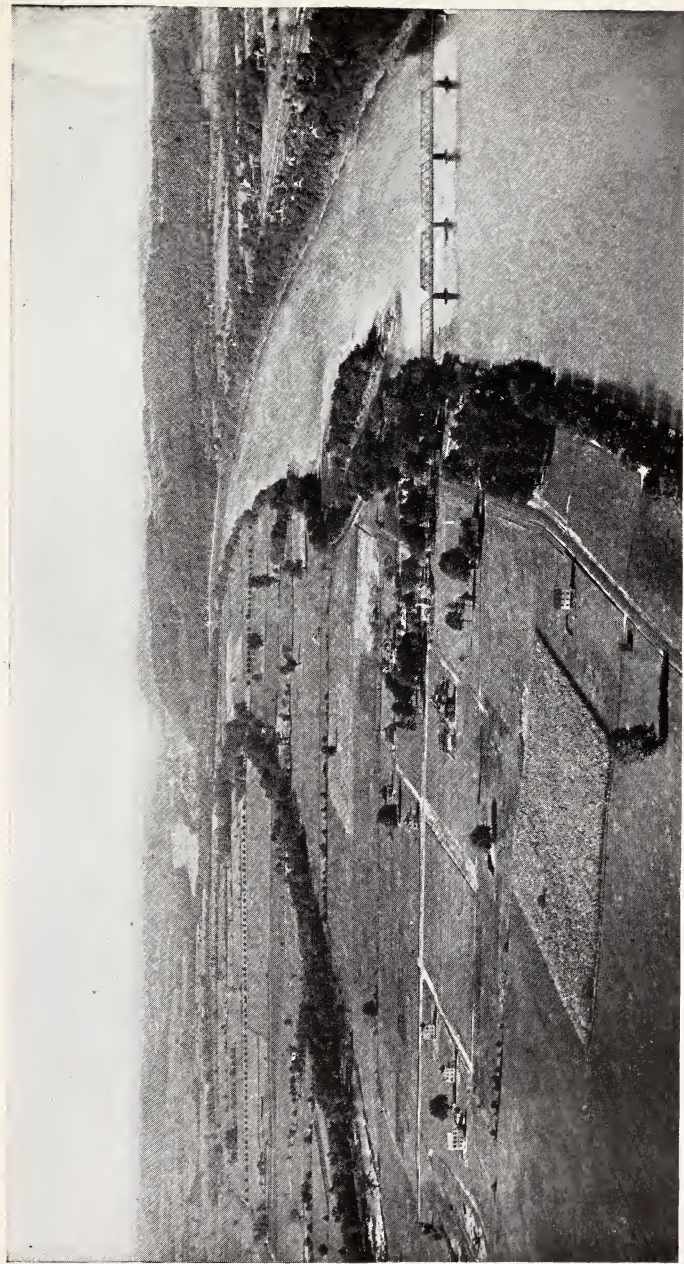
nine miles to McKonkey's Ferry, bringing with them, 1,000 Hessian prisoners, six brass field pieces and several stands of colors. Recrossing the Delaware they marched six miles to Newtown and later the captives were paraded in the streets of Philadelphia to show the doubting Thomases that Washington and his "ragged Continental soldiers" were more than a match for the trained mercenaries of Europe. A few days later he recrossed the Delaware, fought the second battle of Trenton and on the day following, the battle of Princeton, in all of which he was victorious. These victories have justly been called "the turning point of the American Revolution." Washington now took possession of that part of New Jersey from which he had been driven out and the British were forced back to New York.

Now comes the campaign in the summer of 1777. Howe's army, in more than two hundred vessels sailed from the harbor of New York for an undisclosed destination. Washington, then at Morristown, New Jersey, surmising Howe's destination to be Philadelphia, set his army in motion down the York Road and on July 31st spent the night here on this spot called "Neshaminy Camp." The following day he moved to Germantown. Howe's army appeared off the Delaware Capes but learning of Washington's movements again put out to sea. Washington and his army then came back to "Neshaminy Camp" and remained here two weeks, from August 10th to August 23rd, a longer time than he encamped at any other place in Pennsylvania except White Marsh and Valley Forge.

The camp ground lay here on both sides of the Old York Road, on ground sloping from Carrs' Hill to the Little Neshaminy. It was not a fortified or intrenched position—simply an encampment. The Moland House was Washington's headquarters which he shared with Lafayette as a member of his military family. And at yonder house, across York Road, General Greene had his headquarters.

At this encampment Lafayette had an opportunity of observing the whole American Army and has left this description of it:

"Eleven thousand men, but tolerably armed, and still worse clad, presented a singular spectacle in their parti-colored and often naked state. The best dresses were hunting-shirts of brown



Photograph by Aero Service Corporation

AIRPLANE VIEW OF WASHINGTON CROSSING, PA.

Giving a general northward view up the Delaware River, showing in the foreground group of buildings, comprising the village, some of which are owned by the Park Commission; above the bridge, Taylor's Island, where the Durham boats were concealed; on the river bank opposite the lower end of the island is the point of embarkation; on the left, the Valley of Concentration, and in the extreme left distance, Bowman's Hill.

linen. Their tactics were equally irregular. They were arranged without regard to size, excepting that the smallest men were in the front rank. With all this they were good looking soldiers, conducted by zealous officers."

Washington apologized for their appearance to Lafayette. "We ought to feel embarrassed," he said, "in presenting ourselves before an officer just from the French army."

"It is to learn, not to instruct," was Lafayette's apt reply.

Howe finally came up the Chesapeake to the head of Elk and then moved into Chester County, Pennsylvania, where Washington met him, September 11, 1777, at Brandywine. It was in this battle that Lafayette was wounded. He was later taken to the Moravian Hospital at Bethlehem, where he was nursed to convalescence by the Moravian Sisters. In the cruel winter of 1777 and 1778, Lafayette was at Valley Forge sharing with the men their sufferings and privations.

On June 18, 1778, Howe evacuated Philadelphia and started the march through New Jersey in the direction of New York. Washington immediately put his army in motion and crossing Montgomery and Bucks Counties, caught up with him at Englishtown, New Jersey, where was fought on Sunday, June 28, 1778, the battle of Monmouth. The early part of the fight was lost through the treachery of General Charles Lee, but Washington with the aid of Lafayette changed the second part of the battle into victory and they and their army made their camp on the battlefield that night. Before the dawn of the following day the British had fled from the field. Time will not permit me to trace further the steps of Washington and Lafayette ending in victory at Yorktown.

Distinguished Frenchmen—you are now on historic soil, ground hallowed by the presence of Washington and Lafayette. You are in the very center of the theatre of action during the Revolution. If we take this spot as the hub of a wheel, its spokes will radiate to eight battlefields of the American Revolution. Over yonder—across the Delaware in New Jersey, we have Trenton, Princeton and Monmouth. Down in this direction, across the Delaware, we have the battlefield of Red Bank. To the west of this point, in Chester County, Pennsylvania, the battlefield of Brandywine, where Lafayette was wounded, and coming east we have Paoli and Germantown, and down here a

short distance on the York Road, the Crooked Billet—eight battlefields of the American Revolution, all of which you could by motor visit in one day, and I believe we would still have time to stop at Valley Forge where more courage was required than to face the bullets of the enemy.

Distinguished Frenchmen—had it not been for the presence of Lafayette and the aid your country gave us in the hour of our need, there would have been no Valley Forge, no Yorktown, no Antietam nor Gettysburg, nor martyrdom of Lincoln to commemorate; we, today, would be a dependency of Great Britain like Australia, India and South Africa.

Distinguished Representatives of France—in conclusion, permit me to give expression to this thought, which I will ask you to take with you on your homeward journey, that in your pilgrimage to Bucks County and to this historic shrine, you have honored the soldiers of the American Revolution, those brave men who at that early day gave their lives to uphold the principles of human liberty, gave their lives, as we said of our boys sent to France to aid you in your struggle in the World War, for an ideal, the giving of which always ennobles a nation.

Lafayette College Centennial

TOUR INTO BUCKS COUNTY WITH FRENCH GUESTS,
MAY 19, 1932

The route traveled was south down the Delaware River, stopping enroute at New Hope to visit the art gallery at Phillips Mill, where the artist colony were holding their annual exhibition of paintings, then over the Old York Road, past many historic places to the Moland House on the Little Neshaminy, where we were greeted by Col. Henry D. Paxson, who delivered an historical address; then to Doylestown, the county-seat of Bucks County, to visit the museum of the Bucks County Historical Society, then to "Fonthill," the home of the late Dr. Henry C. Mercer with its library, archaeological collection, decoration of tiles and other interesting features, after which tea was served on the lawn, then back to Lafayette College over the Easton Road.

PERSONNEL OF THE PARTY

- Dr. William Mather Lewis, President of Lafayette College.
Dr. Charles Cestre, Professor of American Literature, University of Paris.*
Dr. Felix Gaiffe, Professor of French Literature, University of Paris.*
M. Jacques Gruber, Architect for the City of Paris. Consulted in the laying out of the Parkway, and the Art Museum at Philadelphia.
M. Jean Tillier, General Manager French Lines for New York and Canada. President French Chamber of Commerce in the United States.
Commandant Jules Chabot, Captain Steamship "Lafayette."
Commissaire Amiel and four sailors from the Motor Steamship "Lafayette," all of whom took part in the pageant at Lafayette College, May 17, 18 and 20, 1932.
George H. Shufflebotham, Instructor of Modern Languages, Lafayette College, a French scholar who had charge of the sailors.

* On May 17, 1932, Lafayette College conferred the honorary degree of Doctor of Laws upon Doctors Cestre and Gaiffe.

